REPORT RESUMES

ED 002 992 24

APPRAISAL OF GROUP COUNSELING FOR UNDERACHIEVING, BRIGHT FIFTH GRADERS AND THEIR PARENTS.

BY- OHLSEN, M.M.

ILLINOIS UNIV., URBANA, COLL. OF EDUCATION

REPORT NUMBER CRP-933 PUB DATE 64

EDRS PRICE MF-$0.18 HC-$3.80 95P.

DESCRIPTORS- *GROUP RELATIONS, *GROUP DYNAMICS, ELEMENTARY SCHOOL STUDENTS, PROGRAM EVALUATION, *UNDERACHIEVERS, *GRADE 5, *EXPERIMENTAL PROGRAMS, URBANA, ILLINOIS

A METHOD OF "PRINCIPAL ACTOR ROLE" CLASSIFICATION WAS USED TO EXAMINE THE INTERACTION OF A GROUP OF BRIGHT, UNDERACHIEVING FIFTH GRADERS. IN THIS METHOD, THE PERSON WHO IS THE CENTER OF THE GROUP'S ATTENTION AT ANY GIVEN TIME (EITHER BY TALKING OR BY NONVERBAL BEHAVIOR) IS TERMED THE "PRINCIPAL ACTOR." OBSERVERS CLASSIFY THE VERBAL CONTRIBUTIONS OF THE PRINCIPAL ACTOR IN 28 PRINCIPAL ACTOR ROLES AND THE RESPONSES OF GROUP MEMBERS IN 4 RESPONSE CATEGORIES. ANALYSIS OF THE INTERACTION RECORD PROVIDED AN INDICATION OF RESPONSE PATTERNS OF INDIVIDUALS BOTH TO PRINCIPAL ACTOR ROLES AND TO OTHER INDIVIDUALS. PARENTS OF THE CHILDREN ALSO MET FOR GROUP COUNSELING. ALTHOUGH MOST OF THE PREDICTED CHANGES IN THE STUDENTS DID NOT OCCUR, UNSOLICITED REPORTS FROM GROUP PARTICIPANTS INDICATED SIGNIFICANT IMPROVEMENT IN FAMILY RELATIONS WHICH RESULTED IN SIGNIFICANT IMPROVEMENT OF SOME OF THE CHILDREN. AN ADDITIONAL INVESTIGATION OF THE CLASSIFICATION PROCESS WAS MADE TO DETERMINE THE ACCURACY OF VERBAL CLASSIFICATIONS MADE FROM TAPE RECORDINGS OF THE GROUP SESSIONS BY COMPARISON WITH CLASSIFICATION BASED ON KINESCOPES OF THE SESSIONS. (AL)

ED002992

REFERENCE
COPY
COOPERATIVE
RESEARCH
PROJECT
No. 933

933

UNIVERSITY OF ILLINOIS

APPRAISAL OF GROUP COUNSELING FOR UNDERACHIEVING, BRIGHT FIFTH GRADERS AND THEIR PARENTS

M. M. OHLSEN

1964

COLLEGE OF EDUCATION
UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

Approved 8-5-64

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

APPRAISAL OF GROUP COUNSELING FOR UNDERACHIEVING, BRIGHT FIFTH GRADERS AND THEIR PARENTS

by

M. M. Ohlsen
College of Education
University of Illinois
Urbana, Illinois

Cooperative Research Project No. 933
The research reported herein was supported by the Cooperative Research Program, Office of Education, United States Department of Health, Education, and Welfare.

1964

ED002992

Accepted
8-5-64

TABLE OF CONTENTS

Summary 1
Merle M. Ohlsen

Appraisal of Group Counseling for Underachieving, Bright Fifth Graders 6
Merle M. Ohlsen and George M. Gazda

Group Counseling with Parents of Pre-Adolescent Underachievers 19
George M. Gazda and Merle M. Ohlsen

Empirical Derivation of a Scale for Selection of Clients for Group Counseling 29
Merle M. Ohlsen and Paul A. Wurm

Discrepancies in Classifying Affect from Tape Recordings 45
Merle M. Ohlsen and Paul M. Lerner

A Method for the Classification of Group Interaction, and Its Use to Explore the Influence of Individual and Role Factors Upon the Group Process. 54
Merle M. Ohlsen and Richard Pearson

Change in Topic and Affect During Group Counseling: Its Relationship to Outcomes of Group Counseling 71
Wayne W. Antenen and Merle M. Ohlsen

Summary

Title:	Appraisal of Group Counseling for Underachieving, Bright Fifth Graders and Their Parents
Investigator:	Merle M. Ohlsen
Institution:	College of Education University of Illinois Urbana, Illinois
Project Number:	933
Duration:	September, 1960 to September, 1963.

BACKGROUND.

This study is the fourth phase of a project designed to investigate the application of group counseling to underachieving students with varying levels of learning potential and maturity. Bright underachieving pupils were selected because they represent a serious waste of human resources at a time when this nation needs research scientists and professional personnel.

In addition to appraising the growth achieved by these clients, this study investigated several of the most promising features in the study of group process which developed out of the earlier phases of this project: (1) the extent to which interactions can be reliably classified from tape recordings; (2) the ways in which a principal actor influences other members, and the degree to which his influence is determined by his own personality and the roles which he plays; and (3) the relationship between outcomes in group counseling and the changes in topic and affect. All of these seemed to offer promise for increased understanding of the treatment process and eventually for improving the preparation of school counselors.

OBJECTIVES.

1. To assess the outcomes of group counseling for underachieving, bright fifth graders and their parents and to compare the results achieved with children by counseling only children with counseling only parents.
2. To try to develop an instrument that would enable counselors to identify good prospects for group counseling prior to beginning counseling.
3. To identify discrepancies which occur when investigators classify interactions in group counseling on the basis of tape recordings.
4. To assess the impact of the principal actor upon other members.
5. To determine to what extent growth achieved by clients is a function of the topics which they discuss and the affect that is associated with each topic.

PROCEDURE.

Originally the members of the research team decided to select only those fifth graders whose total I.Q. scores on the California Test of Mental Maturity were 125 or higher, and whose grade point averages for basic school subjects (reading, spelling, language, arithmetic, and science) for the second semester of the fourth grade was 3.50 (A=5.00) or lower. Since the number of pupils available for the study was reduced because of conflicts within the cooperating school system after the original working agreement had been approved, it was necessary to consider with teachers' advice and consultation every fifth grader for whom his language or non-language score exceeded 116 and whose achievement test scores were at least one grade below his expected level and whose grades were B or less.

After subjects were tentatively selected, parents were contacted by telephone to tell them about the project and to schedule an appointment for a parent conference with both parents concerning the project. Prior to the parent conference each prospective child client was interviewed by one of the counselors. The interview with each pupil was used to describe the group counseling process, including what he could expect from the group and what members would expect from him, to get better acquainted with him and to answer his questions concerning counseling and testing experiences, and to assess the pupil's commitment to counseling. These activities also were included in the parent interviews. In addition, parents were told why their child was selected and the parents were asked to volunteer themselves as well as their children for counseling--thus making possible the use of random methods to determine whether the children or the parents were counseled. Of the thirty-three pairs of parents interviewed as prospective clients for the first year project only one refused on-the-spot to participate, but during the control period two additional couples dropped out. For the second year of the project all fourteen couples chosen for the project volunteered for treatment. Three groups of parents (parents of twelve children) and one group (of eight) children were counseled the first year and two groups (of seven) of children were counseled the second year.

Clients included in the project the first year served as their own controls, and were used as controls for those counseled the second year. To obtain another control group with which to compare clients' changes in achievement test scores and grades for especially the follow-up period, but also for the treatment period, each client was matched with another bright underachiever in the school system who was not provided counseling. Mental ability, previous school performance, and father's occupation were considered in matching pupils.

For the process studies kinescopes, tape recordings, and transcriptions of counseling session of adolescents sessions (Broedel, Ohlsen, Proff and Southard, 1960) and tape recording and transcriptions of prospective counselor's session (Gazda and Ohlsen, 1961) were used along with the same data for the clients described above.

Six methods were used to appraise outcomes of counseling for children; (1) The Behavior Rating Scale was adapted from the instrument used in the previous study of adolescents. Each of its 73 items consists of a short description of a behavior or a characteristic based upon Jahoda's (1958) description of a healthy person. The rater used a five point scale to indicate how well the statement described the client. (2) The Shannon-Shoemaker Perception of Self Test required the child to indicate which of each of four choices from 29 scenes was his real self, the person he would like to be, and the person his parents would like for him to be. (3) The social Social Acceptance Scale is a slightly revised version of Rath's Social Acceptance Scale. (4) The Picture Story Test which was administered to the children consisted of four pictures: Card 5 from TAT, Card 1 from Michigan Picture Test, and Cards 4 and 5 from Alexander's Adult-Child Interactions Test. The scoring system used with adolescents was used here. (5) The Iowa

Test of Basic Skills was administered to assess changes in school achievement. (6) School grades also were used to assess changes in school achievement. The appropriate one-tailed t-test was employed to determine whether chance could account for the observed differences.

For the parent clients three instruments were used to appraise outcomes of counseling: (1) Barron's Ego Strength Scale; (2) The Behavior Rating Scale (completed by each client and his spouse), and (3) The Picture Story Test. The following pictures were used for this projective test: Card 1 from Michigan Picture Test, Cards 2 and 13 from TAT, and cards 1.4, and 5 from Alexander's Adult-Child Interaction Test. The one-tailed t-test also was employed here.

A new scoring system was developed on the basis of Jahoda's definition of mental health in order to try to identify good prospects for group counseling. It was used to score Picture Test protocols for those who grew most and least.

Wigell's affect categories were used to score independently tape recordings and kinescopes for all the sessions for two of adolescent groups. Percentage of agreement on identical behavior was used as the index of agreement for reporting on the extent of agreement achieved in classifying behavior for these two media.

To assess the impact of the principal actor upon other members, Ohlsen and Pearson used the roles originally developed by Cohn and Apostal for Cooperative Project # 623 and the response patterns used in the same project by Katz, Ohlsen, and Proff. Percentage of use of groups members' responses were converted to Arc-sine values in order to apply analysis of variance to the analysis of three operating variables: (1) the role played by the principal actor, (2) the person who played the role, and (3) others reactions to him.

For the study of the relationship of outcomes in group counseling to changes in topic and affect Wigell's topic and effect categories were used. Response patterns of clients from six groups who made least and most growth were compared. Three statistical techniques were used to test the various hypotheses presented in this paper: rank order correlations, one-tailed t-test, and Pearson Product Moment Correlations.

RESULTS.

The results for this Cooperative Research Project are presented in seven separate papers. In order to be as brief as possible the findings of more than one paper are sometimes combined into a single paragraph.

In general, the results obtained for the children's groups were disappointing. In those few instances in which significant results were obtained they usually involved either increased congruence between perception of self and ideal self or increased acceptance by peers. These findings were supported by teachers' and parents' comments during follow-up testing. Apparently these pupils improved their behavior and attitudes in school. Other comments indicated that psychosomatic illnesses were markedly improved: e.g., one boy's asthma improved considerably; another boy's stomach cramps disappeared; and a girl's severe headaches disappeared.

Though the statistical analysis of parents' test data suggests that chance could account for most of the observed differences in test scores, parents did report some other changes which indicated that they may have received some help. For example, Mr. A. changed to a more appropriate job for him, Mr. B. became strong enough to face and work out some employment problems, and Mrs. E., an overprotective mother, came to understand her relationship with her son better and to let him do what most boys his age would be expected to do.

The instrument which was developed to identify good prospects for group counseling did not prove to be effective. From this work, however, some hunches were identified which may be useful in future research on this problem.

When certain specific interactions of adolescent clients were analyzed and classified from both tape recordings and kinescopes, high agreement between media was achieved (82 percent for one group and 83 percent for the other). Affect associated with discussion topics can be reliably classified from tape recordings. Contrary to expectations, the most common classification errors were: affect classified negative from tapes was classified as "no affect" from kinescope and affect classified as positive from tapes were classified "no affect" from kinescopes. Some interesting implications of these findings for helping teachers and counselors understand adolescents were discussed.

From the study of the principal actor and his impact upon others, these results suggest that individual characteristics of the respondent and the person who plays the role rather than the principal actor's role, are most important in determining the type of response an individual makes in a group. These findings emphasize the importance of careful selection of group members in improving chances for success in group counseling. Further research of this type shows promise for the study of the group counseling process. The method for classifying group interaction employed in this study was found to be reliable and workable in tracing the influence of such elements in group counseling. In addition to the three elements (principal actor's role, the influence of his own personality, and others response to him) used in this study, further research should also take account of the general therapeutic climate in which the interaction occurs. The ground work has been done for this, and with the use of the arc-sine technique, statistical methods are now available to study the interaction of these four elements simultaneously.

Finally, the relationship of change in topic (and related affect) to client growth failed to support the major hypothesis examined. In other words, the predicted positive relationship between outcomes of group counseling and increased positive-negative affect ratios associated with topics self, other persons, members of immediate family, and authority figures was not found. A number of explanations for these results were discussed. If further work is to be done in this area, relevant topics should be selected for each client just prior to counseling, and/or during the early stages of counseling, and then the observer should note the changes in affect observed for each relevant topic. Use of the general categories employed in this study probably provides the best single explanation for failure to obtain significant results.

CONCLUSIONS.

Although the investigator believes that group counseling is an effective technique, this project failed to demonstrate its value for underachieving, bright, fifth graders and their parents. Nevertheless, he strongly encourages further research to appraise its value for this purpose. To improve the quality of such research, the first paper in the report discussed essential changes in the treatment method, the research design, the use of cooperating school resources, and evaluation instruments.

The content scoring system developed for scoring the Picture Stories failed to identify good prospects for group counseling but with the suggested changes in the scoring method the investigators encouraged further work before abandoning the technique.

Certain verbal interactions in group counseling can be reliably classified from tape recordings. However, preliminary impressions gleaned from this study, and earlier work, suggest that clients, as well as the counselor, use non-verbal as well as verbal cues in reacting to each other. If, therefore, the investigator is going to take account of all data used by members in reacting to each other, he must obtain a video record of the interactions. Furthermore, for effective classification a video record is certainly preferred to live classification of these behaviors.

The method developed for the principal actor study shows promise for the study of group process. For future studies the elements studied should be extended to include the general therapeutic climate in which the interaction occurs.

Finally, more attention should be given to setting specific goals for clients and to appraising growth in terms of these goals. It was concluded that failure to obtain support for the hypothesis concerned with the relationships between topics discussed (and related affect) and counseling outcomes may have resulted in part at least from the use of general discussion topics.

BIBLIOGRAPHY.

There are 76 different references cited in seven papers included in this report.

APPRAISAL OF GROUP COUNSELING FOR UNDERACHIEVING, BRIGHT FIFTH GRADERS

Merle M. Ohlsen, University of Illinois
George M. Gazda, University of Georgia[1]

This study is the fourth phase of a project designed to investigate the application of group counseling to underachieving students with varying levels of learning potential and maturity. Bright underachieving pupils were selected because they represent a serious waste of human resources at a time when this nation needs research scientists and professional personnel.

There are a number of good reasons for choosing fifth graders. Gesell and Ilg (1946) reported the ten-year old is receptive to social information, that it is relatively easy to appeal to his reason, that he is ready to participate in elementary discussions of social problems, that he has especially high esteem for his gang or club, and that he likes the sense of solidarity which comes from keeping a group secret. Lerner (1937) found that children between the ages of ten and thirteen were able to empathize, and Proff and Hastings (1958) found that below grade five communication skills for even bright children dropped off rapidly. Shaw and McCuen (1960) indicated that bright underachievers could be identified by grade five. Their data revealed that girls were just beginning to exhibit the behavior associated with underachievement, but that boys exhibited this behavior as early as the first grade. Broedel, Ohlsen, Proff and Southard (1960) concluded that the attitudes of the gifted, underachieving ninth grader which seemed to account for underachievement were already deeply ingrained and difficult to change. Findings reported Buchmueller, Porter, and Gildea (1954) support the previous conclusion. Finally, these fifth graders were taught in a self-contained classroom--a setting in which work with the teacher has greatest possibilities for helping the pupils. Furthermore, the pupils were scheduled to be in such a setting at the time of follow-up testing.

From his review of the research on achievement of gifted children Gallagher (1960, pp. 32-33) described two problem areas which have implications for treating these children: "The first problem area is one where the children show limited motivation for school work, a reluctance to respond to instruction, and resistance to attempts to get them to do more. These difficulties stem from emotional or attitudinal difficulties that the child brings into the school from home. The second major problem relates more to the school's inability to provide sufficient stimulation to children who are fast and enthusiastic learners." Assuming that both were major contributors the investigators for this project decided to try to help both the parents and the teachers as well as the pupils themselves. For part of the subjects group counseling[2] was provided for their parents and for the other part, group counseling was provided for the children. For both some assistance was provided for their teachers at two meetings scheduled by the research staff. Teachers also were encouraged to seek additional assistance as needed. The original proposal also called for a third group of subjects for which counseling was to have been provided for both the pupils and their parents. This was eliminated from the project because of inadequate number of subjects and insufficient funds.

---

[1] The authors are grateful to Dr. Fred C. Proff for helping design the proposal and for helping supervise the counselors and to Wayne Antenen, Paul Lerner, Virginia Moore, Richard Pearson, and Paul Wurm for doing the testing and helping analyze the data.

Buchmueller and Gildea 's (1949) experiences with sixth graders suggested that helping parents may be more effective than attempting to help the pupils themselves. At this age the child is dependent upon his parents and his primary emotional bonds and sources of influence are within the home. They also suggested that the teacher is, for most pre-adolescents, the most influential adult outside of the home. Therefore, it would seem that consultations with the teachers should increase the chances of helping underachieving pupils improve school achievement.

Procedures

The Sample

Originally the investigators decided to select only those fifth grade pupils whose total I.Q. scores on the California Test of Mental Maturity were 125 or higher, and whose grade point averages for basic school subjects (reading, spelling, language, arithmetic, and science) for the second semester of the fourth grade was 3.50 (A = 5.00) or lower. Since the number of pupils available for the study was reduced because of problems within the cooperating school systems after the original proposal had been approved, it was necessary to consider every available fifth grader for whom either his language or non-language I.Q. scores were 116 or above and whose achievement test scores were at least one grade below his expected level and whose grades were B or less. At this point the pupils' teachers were consulted to determine whether these pupils could be expected to do better and to profit from group counseling. Then the WISC was administered to the twenty pupils selected from the two cooperating schools. For twelve of the twenty included in the sample their IQ's on the WISC was below 116; the average for their full-scale was 112. According to Shaw (1961), however, these pupils still could be classified as bright. He strongly urged schools to identify and to try to help all such youngsters in the top fourth of the population with reference to mental ability who are underachieving. Fourteen such youngsters who were referred to the University Guidance Training Center from neighboring school districts were selected for treatment the second year of the projects.

At this point the parents were contacted by telephone to determine whether they were interested in having their children participate in the counseling project and an appointment was made for an interview with parents.

---

[2] This process is defined by Ohlsen in Chapter 5 of Guidance Services in the Modern School, Harcourt , Brace, and World, 1964. The junior author counseled the three parents' groups and two of the children's groups. The other children's group was counseled by the senior author.

Prior to the parent conferences each prospective pupil client was interviewed by the counselors for the groups. The interview was used to describe the group counseling process, including what he could expect from the group and what members would expect from him, to get better acquainted with the pupil and to answer his questions concerning the counseling and testing experiences, and to assess the pupil's commitment to counseling. Then the parents were interviewed together. In addition to what was done in the interviews with the children the parents were told why their child was selected and the parents were asked to volunteer themselves and their child for group counseling thus permitting the staff to determine by random methods whether the pupil or his parents were assigned to a counseling group. The counselor also tried to assess the parents' readiness for counseling, and their ability to accept counseling for their children, the nature and seriousness of their problems, and their impact upon other prospective clients.

Of the thirty-three pairs of parents interviewed as prospective clients for the first year project only one refused on-the-spot to participate, but during the control period two additional couples dropped out. For the second year project all fourteen couples selected for interviews volunteered for treatment and agreed to transport their children to the University Guidance Training Center for counseling.

When the interviewing was completed the project staff selected clients for counseling groups. Because of conflicts in parents' schedules random methods could not be followed completely. However, where parents were counseled they were always placed in the same group. The first year one group of eight children and three groups of parents (parents of twelve children) were counseled. The second year two groups, each including seven children, were counseled. Except for one parent group which had additional meetings following posttesting, each group met twice a week for eight weeks.

Pupils included in the project the first year served as their own controls, and were used as controls for those counseled the second year. The control period was the eight weeks just prior to the counseling period. The plan cleared originally with the cooperating schools called for pupils to be assigned to the same group for the sixth grade. Since that was not done, no follow-up testing was done with the sociometric test.

The Setting

Pupils who were counseled the first year met in the school lunch room beginning about twenty minutes after classes were dismissed for the day. The pupils and the counselor sat around a table. Also available for pupils' use was a blackboard, sketching paper, pencils, and crayons. However, little use was made of these materials. A tape recorder and television camera were placed in the room, and other television equipment was placed just outside of the room. Because of difficulty with the television equipment, the television crew often had to come into the room. Another distraction was other school children peering in the room through the windows.

For the second year of the project conditions were improved considerably. Clients met with their counselor in the one-way vision mirror room of the guidance laboratory. Again they sat in a circle, but without a table. The interactions were observed (with clients' knowledge) and classified by members of the research staff.

Evaluation Instruments

Six methods for evaluating change in clients were used in this study: the Behavior Rating Scale, the Shannon-Shoemaker Perceptions of Self Test, the Social Acceptance Scale, the Picture Story Test, the Iowa Tests of Basic Skills, and grade point averages (for school subjects designated earlier,) Data obtained from each will be presented and discussed in this order.

The Behavior Rating Scale which was developed originally for ninth graders is described by Broedel, Ohlsen, Proff, and Southard (1960). It was adapted for these pupils to obtain parents' and teachers' perceptions of these pupils. Each of its 73 items is a short description of behavior or a characteristic of an individual which is based upon Jahoda's (1958) description of a healthy person. The rater uses a five-point scale to indicate how well the statement describes the client; this scale varies from "This statement describes him very well." to "This statement does not describe him." Originally a seven-point scale was used for this instrument, but Gazda's (1959) work demonstrated that such s scale called for finer discriminations than judges could be expected to make, and consequently test-retest reliabilities were not satisfactory. For the present scale test-retest reliabilities obtained from a group of twenty-six adults with a two-weeks intervening time period was fifty-seven percent identical responses. Though this is less than one would like it was judged to be satisfactory for an exploratory study.

An algebraic score was obtained for each client by summing changes on each item, either from pre-testing to post-testing or from pretesting to follow-up testing. For a shift of one point on the scale in the direction of improved adjustment a plus one was assigned, and for a similar shift in the opposite direction a negative one was assigned. Broedel, Ohlsen, Proff, and Southard's (1960) study indicated that certain defensive clients who improved their adjustment demonstrated negative movement on this scale. When, therefore, parents' ratings appeared to be defensive, and this was exhibited in their original description of their children to the extent that their ratings deviated from the mean for the group by more than two-thirds of a standard deviation in the direction of ideal adjustment, the scoring procedure was reversed for these clients.

The Shannon-Shoemaker Perceptions of Self Test consists of twenty-nine scenes typical of activities engaged in by fifth graders. The test tries to obtain perceptions of self and ideal self. For each picture a subject is asked to answer the following questions about the youngsters pictured in the scene: (1) Which of these would kids your age most like to be? (2) Which of these would your parents want you to be? (3) Which of these would you like most to be? (4) Which of these are you? Since all the characters in the scenes were boys, the girls included in this study were asked to think of similar pictures of girls and respond accordingly. For the test to be valid one must assume that the clients identified with characters in the stories. Only responses to questions (3) and (4) were used in this study.

For a sample of seventeen children, and an eight-week control period, a test-retest r of .66 (significant at .01 level) for question (3) was obtained and an r of .84 (significant at .001 level) was obtained for question (4).

The Social Acceptance Scale is a slightly revised form of Raths' Social Acceptance Scale. It was selected because of the way in which Raths developed it with the assistance of elementary school teachers. Davis (1948) and Fleming and Snyder (1947) both used this instrument successfully in appraising outcomes of counseling. Further support for use of such instruments is presented by Gronlund (1959, pp. 12-13, 166-176),

Every pupil enrolled in the class from which clients were selected placed every other pupil in one of five categories. To obtain an algebraic score for each client each pupil's rating of a client was assigned points based on a five-point scale 3, 2, 1, 0, and -2; zero was assigned to the response "persons I do not know well."

The Picture Story Test which was administered to the children consisted of four pictures: Card 5 from the TAT, Card 1 from Michigan Picture Test, and Cards 4 and 5 from Alexander's Adult-Child Interaction Test. The directions for administering the test are essentially those used for TAT. It was administered individually using 8 1/2 x 11 1/2 pictures. For this project it was used primarily to assess changes in perceptions of self and others. It was scored using a content scoring system originally described by Ohlsen and Schultz (1955). Later it was revised and adapted for assessing outcomes of counseling by Broedel (1958) and Gazda (1959). Broedel (1958) obtained inter-score reliability of ninety-two percent perfect agreement on 932 items. Intra-score agreement of ninety-four percent was obtained on 1,667 items. For similar reliability studies Gazda (1959) obtained inter-scores reliability of eighty-seven percent and intra-scores reliability of ninety percent. In order for the results to be valid one must assume that the story teller identifies with a specific character in each picture and expresses his feelings through that character. In addition to many others Broedel (1958), Gazda (1959), and Zimet and Fine (1955) used this method to measure changes in attitudes toward self and others.

The Iowa Test of Basic Skills was administered to assess changes in school achievement. Inasmuch as it is a well-known and accepted test which was carefully constructed and standardized no justification for its use is given.

Even though many of these pupils were just beginning to underachieve, and were not underachieving to the extent that the original proposal designated desirable for this study, the investigators elected to use changes in grade point averages (for the school subjects designated earlier) as criterion for change.

All tests, except the Iowa Tests of Basic Skills, were administered four times: (1) at beginning of control period (late October), (2) at end of control period (eight weeks later--also pretest for counseling), (3) post-testing (immediately after counseling was terminated), and (4) follow-up testing (one year from beginning of counseling period). The Iowa tests were administered in October each year.

Statistical Analyses

The appropriate one-tailed *t* test was employed to determine whether chance could account for the observed differences, and the .05 level of significance was used.

Table I

Changes Noted in Clients

	Group A	Group B	Group C	Parents Counseled
Behavior Rating Scale				
Parents' ratings	NS	NS	NS	NS
Teachers' ratings	NS	NS	NS	NS
Shannon-Shoemaker Scale	NS	NS	.025PF	.05-C; .05PP
Social Acceptance Scale	.05C	.05PP	.025PP	NS
Picture Story Test	NS	NS	NS	NS
Iowa Basic Skills	NS	NS	NS	NS
Grade Point Averages	NS	NS	NS	NS

N. B. To obtain another control group with which to compare clients' changes in achievement test scores and grades for especially the follow-up period, but also for the treatment period, each client was matched with another bright underachiever in the school system who was not provided counseling. Mental ability, previous school performance, and father's occupation were considered in matching these pupils.

Results

In general, the results were disappointing. Few significant positive results were obtained. All significant changes are noted in Table 1. When a significant change occurred during the control period, a C is noted beside the level of significance; when it occurred between pre- and post-testing PP is noted beside it; and when it occurred between pre- and follow-up testing PF is noted beside it. Since there were four groups involved, data obtained from each is reported separately; A - those eight clients who were counseled the first year; B - those seven clients who were counseled by the same counselor the second year; C - those seven clients who were counseled by the other counselor the second year; and finally those twelve whose parents were counseled the first year.

Discussion

In the few instances in which significant results were obtained they usually involved either increased congruence between perception of self and ideal self or increased acceptance by peers. These findings were supported by teachers' and parents' comments during follow-up testing. Apparently these pupils improved their behavior and attitudes in school. Other comments indicated that psychosomatic illnesses were markedly improved; e.g., one boy's asthma improved considerably; another boy's frequent stomach cramps disappeared; and a girl's severe headaches disappeared.

One possible explanation for these negative results is that group counseling is not effective for this type of client. Because of the conditions under which this study was conducted the investigators cannot accept this conclusion without further research. In order to encourage further research and to help others avoid the weaknesses of this study, the writers will discuss these weaknesses and make suggestions for correcting them.

Common weaknesses of research concerned with appraising outcomes of counseling were recently discussed by Ohlsen (1963). From his list of common weaknesses the following apply to this study: (1) poor choice of clients and controls; (2) inadequate definition of goals for clients and criteria for evaluating growth of clients; and (3) poor choice of evaluation techniques. The writers also discuss ways of adapting the treatment to better meet the needs of these clients.

Clients

Though every step of this project was cleared with the primary cooperating school system involved well ahead of time, certain cooperating school staff problems arose which prevented the investigators from following the proposal as planned. Had long-term working agreements been established with other school systems and had the time schedule been more flexible, certain compromises which were made in the plan could have been avoided by moving the project to another school system. For example, only those clients who exhibited some genuine interest in counseling, and whose parents exhibited genuine interest in counseling for themselves and their children, and who were underachieving to the extent indicated in the proposal would then have been included in the project. Failure to obtain adequate number of clients which met the original criteria could easily, in itself, account for the negative results. Moreover, the writers' experiences in other similar projects suggest that having to choose from a pool which contains more appropriate clients than can be treated tends to have a positive influence on those chosen.

In order to conduct research within a school setting every step of the program must be cleared well ahead of time with the cooperating school staff, the time schedule must be somewhat flexible in order to adapt to necessary changes, and occasionally it will be necessary to change schools and/or add new schools for a specific project. To achieve these objectives researchers must establish a sound working relationship with a number of cooperating schools--a working relationship similar to that which has worked successfully in providing student teaching for teacher education. Where these centers have been established with care, school personnel have achieved genuine satisfaction from helping researchers investigate important problems and researchers have enjoyed helping practitioners solve problems and apply new knowledge in the field.

From this project the investigators also concluded that individual intelligence should be used to supplement group test data in selecting future clients. Group test results cannot be relied upon to identify gifted pupils.

Mitchell's (1963) recent findings also indicated that underachievement is rarely general for a given student, but usually occurs in certain subject areas only. In the future, therefore, perhaps researchers should consider this fact in selecting clients. Perhaps they also should use as criterion of growth improved achievement in only those subjects for which the child is underachieving.

Goals and Criteria

Like most studies concerned with appraising outcomes of counseling, this study failed to define criteria for evaluating changes in clients in terms of specific and unique goals which were defined for each client. Its investigators should have heeded Edward's and Cronbach's (1952) warning against use of general measures of adjustment. Such a measure often is relevant for only part of the clients, and furthermore when the data are combined for various clients the net result may conceal growth for individual clients. The latter may apply even when the investigator uses an appropriate device for assessing relevant changes in clients. If, for example, both nonconforming and overconforming clients were included in the experimental group, and an adequate instrument were selected to appraise changes in clients, the growth achieved by these two groups could cancel each other out. The obvious solution to such a problem is to define criteria for growth for each client prior to, or during the early stages of treatment, and to use signed numbers to appropriately appraise growth for each client.

Further support for this notion of appraising clients' growth in terms of clearly defined components of personality is also presented by Cartwright (1957),

> "We think that at the present stage of the science of evaluation, it is of major strategic importance to analyze that global dependent variable called personality change into its discriminable, independent components if such exists. And we think they do exist. A good student with no study problems who experiences difficulty in interpersonal relations is not likely to improve his work efficiency very much as a result of counseling. He is very effective to start with. But he is likely to improve his interpersonal skills, for that is where he needs to change and can change for the better. And if he does come out with greater ease and facility in his relationships, who knows: he may even be less effective (or less compulsively effective) in his work. And 'successful counseling' for him would likely mean very different changes in behavior from what it would for a student who started with nothing but study problems." (p.266)

For a group counseling project like this one, data for defining goals for each client may be obtained from conferences (prior to beginning counseling) with pupils, their parents and their teachers and from examination of prospective clients' cumulative folders. Additional material may be obtained from pretesting and from clients' comments during the first few counseling sessions. These goals, in turn, should be used to define criteria for evaluating growth for each client. After the criteria are carefully defined appropriate instruments or observation techniques can be selected or developed to evaluate each client's growth in terms of meaningful criteria for him. Thus, the same data should be collected on all clients only when these data provide relevant evidence with reference to common goals for clients.

Evaluation Techniques

Finding adequate devices to detect personality changes in normal youth is difficult. Such devices were usually designed to assess changes or to diagnose personality problems in disturbed youth. When used to pretest normal clients, the scores are such that there is little opportunity for post- and follow-up testing scores to be improved. Moreover, Bereiter (1962) concluded that present methods of test construction tend to produce tests that are insensitive to the differential changes that educational and guidance practices are supposed to produce. Where these tests are used, negative findings can be expected. However, this does not mean that the situation is hopeless. New measurement devices are being developed. For example, Bereiter described an approach to test construction which causes tests to converge on the factor change rather than the factor of status. Furthermore, tests like the picture story test can be scored in terms of specific goals set for individual clients. When, for example, the scorer does a content analysis of picture stories for a child who has had conflict with authority figures, he can note every time an authority figure appears in the story and the affect with which it was discussed (assuming that if the child has been helped that he will describe his identification figure interacting positively increasingly more frequently with the authority figure from pretesting to posttesting to follow-up testing.) Relevant topics discussed during counseling, and the extra sessions provided during the follow-up testing, may be analyzed in a similar fashion.

Treatment Method

Finally, the investigators concluded that certain changes should be made in future research in the treatment method in order to increase the chances of helping such pupils, and thereby obtain significant results. In addition to the work with these children, and to earlier work with primary school age children, adolescents, and adults, some pilot work was done with sixth, seventh, and eighth graders to determine what changes seemed to be essential to adapt group counseling procedures to fifth graders. This pilot work suggests that the discussion type of counseling that worked with ninth graders also works with seventh and eight graders, but that certain changes seem to be essential for fifth and sixth graders:

(1) These children need more carefully defined structure and more limits than older clients. They also should be assigned to smaller groups--perhaps groups of five or six instead of seven or eight. Though the

investigators found that these children do have some ability to empathize, as Lerner (1937) reported, they have difficulty maintaining a sustained interest in another's problem. They also had difficulty in setting and maintaining limits for themselves. In part, distractions accounted for the latter. Being somewhat anti-social, nonconforming youth also accounted in part for this problem. Perhaps these youngsters should not be treated in a separate group. Perhaps they should be placed in groups with some other clients who either are good achievers or are genuinely concerned about improving their school achievement and who may be perceived as prestige figures by underachievers. Obviously, a room with a minimum of distractions and privacy is needed.

(2) Parents and teachers must be involved in the treatment process. Many situations arose in which these youngsters felt that they had been treated unfairly and there was nothing they could do about it. Whereas adolescents are able to help a peer convey to the hurter how they have been hurt and to help him do something about the situation or to live with it or to leave it, fifth and sixth graders feel trapped; and they seemed to lack the resources for getting out of the trap without the assistance of an understanding adult. A fifth grade boy expressed the idea as follows: "We're just kids and don't count for much; even dogs get better treatment than we do." Sentegrad (1961) achieved excellent results with such youngsters, but he also provided group counseling for their parents and teachers. If this is not possible, these investigators concluded that regular consultations with teachers and parents are essential, and that there is little likelihood for helping a child when either refuse to cooperate at least to this extent. For this project insufficient time was spent with the parents and the teachers of the children who were counseled.

(3) Shorter treatment periods with more meetings per week may make more efficient use of treatment time. Perhaps it would be better to see them for forty-five minutes three times a week than twice a week for an hour. These youngsters often became restless the last ten or fifteen minutes of the hour.

(4) More and better use of play materials are recommended. In addition to sketching paper and crayons, these investigators recommend that modeling clay, finger paints, and a variety of dolls be made available for these children. Simple wood working equipment also could be used effectively. Though these children are old enough to understand that this is a work period, they often need a variety of materials with which to work to express their feelings and to learn to cope with the hurtful problems associated with certain of these feelings. Sociodrama and psychodrama also could have been used more effectively with these groups.

(5) Though both investigators strongly favor treating junior and senior high school students in mixed groups, they tend to agree that it may be better to treat boys and girls of this age separately. Girls, being more mature and more verbal, tend to dominate the discussion

and to threaten the boys with the discussion of some topics pertaining to sex. At this age there is much teasing and some genuine antagonism between boys and girls. Because these feelings do interfere with the development of a good therapeutic climate Gazda recommends that boys and girls be separate at this age for counseling. Ohlsen agrees, but with reservation; group counseling may be the ideal place in which to deal with the underlying feelings that account for those behaviors. According to Ginett (1961) the prevailing practice in clinics is to separate the sexes for treatment during the latency period.

(6) Clients must be selected with care. Because enough clients of the type desired were not available some clients who did not meet the original criteria for underachieving and who did not recognize the need for help and the degree of commitment for change desired were accepted for treatment. Counselors must be able to accept for treatment only those clients whom they feel reasonably certain that they can help, and preferably those who want help. Even after a group has begun, the research design must be flexible enough to enable counselors to remove a client from a group or to assign him to another group. Both Fiedler (1949) and Broedel, Ohlsen, Proff and Southard (1960) found that even a single client can be such a threat to others or create such conflicts that a therapeutic climate is never achieved. For this reason it is suggested that every precaution be taken to select the best possible combination of individuals for every treatment group. For some clients temporary or trial placements may be desirable.

Summary

Although the investigators believe that group counseling is an effective technique, they failed to demonstrate its value for underachieving, bright fifth graders. Nevertheless, they strongly encourage further research to appraise its value for such children. To improve the quality of such research the investigators have discussed essential changes treatment method, research design, and evaluation instruments.

REFERENCES

Broedel, J. W. A study of the effects of group counseling on the academic performance and mental health of underachieving gifted adolescents. Unpublished doctoral dissertation, University of Illinois, 1958.

Broedel, J.; Ohlsen, M.; Proff, F.; & Southard, C. The effects of group counseling on gifted adolescent underachievers. Journal of Counseling Psychology, 1960, 7, 163-170.

Buchmueller, A. D. and Gildea, Margaret, C. A group therapy project with parents of behavior problem children in public schools. American Journal of Psychology. 1949, 106, 46-52.

Buchmueller, A. D.; Porter, Frances; Gildea, Margaret C. A group therapy project with parents of behavior problem children in public schools. Nervous Child. 1954, 10, 415-424.

Cartwright, D. S. Methodology in evaluation. Journal of Counseling Psychology. 1957, 4, 263-267.

Davis, Ruth G. Group therapy with social acceptance in first grade. Elementary School Journal, 1948, 49, 219-223.

Edwards, A. L. and Cronbach, L. J. Experimental design for research in psycho-therapy. Journal of Clinical Psychology, 1952, 8, 51-59.

Fielder, F. E. An experimental approach to preventive psychotherapy. Journal of Abnormal and Social Psychology, 1949, 44, 386-393.

Fleming, Louise, & Snyder, W. R. Social and personal changes following non-directive play therapy. American Journal of Orthopsychiatry. 1947, 17, 101-116.

Gallagher, J. J. Analysis of research on the education of gifted children. Springfield, Illinois: State of Illinois, Supt. of Public Instruction, 1960.

Gazda. G. M. The effects of short-term group counseling on prospective counselors. Unpublished doctoral dissertation, University of Illinois, 1959.

Gazda. G. M., & Ohlsen, M. The effects of short-term group counseling on prospective counselors. Personnel and Guidance Journal, 1961, 39, 634-638.

Gersten, C. Group therapy with institutionalized juvenile delinquents. Journal of Genetic Psychology, 1952, 80, 35-64.

Gesell, A. & Ilg, Frances, L. The child from five to ten. New York: Harper & Bros., 1946.

Ginott, H. S. Group psychotherapy with children. New York: McGraw-Hill, 1961

Gronlund, N. E. Sociometry in the classroom. New York: Harper & Bros., 1959.

Jahoda, Marie. Current concepts of positive mental health. New York: Basic Books, Inc. 1958.

Lerner, E. The problem of perspective in moral reasoning. The American Journal of Sociology 1937, 43, 294-299.

Mitchell, B. C. The underachiever--a new approach. Paper read at APGA Convention, Boston, April 9, 1963.

Ohlsen, M. M. Evaluation of group techniques in the secondary schools. Ithaca: Cornell University Press, 1963.

Ohlsen, M. M., & Schultz, R. E. Projective test response pattern for best and poorest student teachers. Educational and Psychological Measurement, 1955, 15, 18-27.

Proff, F. C., & Hastings, J. T. The early identification of the gifted. A mimeographed paper read by Proff at APA meeting in Washington, D. C. in 1958.

Shaw, M. C. & McCuen, J. T. The onset of academic underachievement in bright children. Journal Educational Psychology. 1960, 51, 103-108.

Shaw, M. C. Definition and identification of academic underachievers. In L. Miller (Ed.). Guidance for the underachiever with superior ability. Washington: U. S. Gov't. Printing Office, 1961, pp. 15-30.

Senstegard, M. Group counseling methods with parents of elementary school children as related to pupil growth and development. Mimeograph report, State College of Iowa, Cedar Falls, 1961

Zinet, C. M., & Fine, H. J. Personality change with group therapeutic experiences in a human relations seminar. Journal Abnormal and Social Psychology. 1955, 51, 68-73.

GROUP COUNSELING WITH PARENTS OF PRE-ADOLESCENT UNDERACHIEVERS

George M. Gazda and Merle M. Ohlsen[1]
University of Georgia University of Illinois

This study was part of a larger study investigating the application of group counseling techniques in aiding underachieving students. Earlier Broedel, Ohlsen, Proff and Southard (1960) reported that the attitudes of ninth grade gifted underachievers were difficult to change. Buchmueller, Porter and Gildea (1954) lent support to Broedel's *et.al*., findings.

Although there was some evidence that group counseling could be applied to pre-adolescents themselves, and in fact was as a part of this project reported elsewhere (Gazda and Ohlsen, 1962), there was reason to believe that group counseling for the pre-adolescents' parents would be as effective as the treatment in groups of the youngsters themselves.

Research by Buchmueller, Porter, and Gildea (1954) indicated that group therapy of parents of elementary school children with behavior problems resulted in "clear-cut" improvement in the behavior of eighty per cent of the children. Gabriel (1952) used group therapy to help mothers improve their attitudes and acceptance of their children who were in individual therapy. Parle (1954) reported that fifty per cent of the children of mothers who had received group therapy were rated by teachers as improved to the point of being normal and an additional thirty per cent were rated as showing marked improvement. In a recent study, Sonstegard (1962) reported significant improvement in reading for fifth grade underachievers whose parents and teachers also were treated in groups.

Buchmueller's *et*. *al*., research was initiated following a pilot study by Buchmueller and Gildea (1949) in which parents of sixth grade underachievers were successfully treated in group therapy. Their research along with Gabriel's, Parle's, and Sonstegard's seems to lend credence to the hypothesis of the authors, i.e., that the fifth grader is largely influenced and controlled by his parents, and changing the attitudes and behavior of the parents in a positive way should result in improved behavior of the child. It was on this premise that the counseling of parents was undertaken.

PROCEDURES

The original research plan of the authors was to provide group counseling for bright fifth grade underachievers, for a group of parents of bright fifth grade underachievers, and for both parents and children in separate groups for each. The combined approach was abandoned for lack of subjects within the schools cooperating in the research and insufficient funds to carry out the research.

---

[1] The authors are grateful to Wayne Antenen and Paul Wurm for their assistance in helping analyze the data.

Following the tentative selection of the students -- based on grades and test data in the school files, and interviews with their teachers -- the parents were phoned and the proposed project was briefly described to them. In addition, the parents were invited to meet with the research staff at their child's school for a more complete description of the project. During the meetings with the husband and wife, they were told about the project and its purpose, why their child had been selected, what group counseling would be like, what would be expected of them and the counselor, and finally how they might benefit. In addition to the orientation aspects of the interview, an assessment was made of the parents' readiness for group counseling, the nature and extent of their problems, and how they might be received by other group members. Each set of parents was asked, during the initial interview, to volunteer themselves and their child for group counseling in order that the subjects, parents and children alike, could be selected randomly.

Of the thirty-three husband-wife pairs interviewed, only one declined at the time of the interview to participate. During the control or wait period two other pairs declined.

Scheduling problems prevented complete randomization of the sample and in a few instances individuals were placed in groups simply because they could attend at the time and place scheduled. There were three groups of counseled parents composed of six, seven, and nine members. Husbands and wives were placed in the same group. In two instances only one of the parents was able to attend.

Prior to group placement, all parents were first tested and were then told that they would have to wait eight weeks (the control period since each person was his own control) before counseling began. At the end of eight weeks the parents were re-tested, assigned to groups, and counseling was begun. Each group met for two one-hour sessions each week for a total of eight weeks. Each session of groups A and B was recorded and kinescoped and all sessions of group C were tape recorded. (All parents had agreed during their initial interviews to permit the recording and kinescoping of all sessions.) All participants were post-tested at the end of the counseling period. No follow-up testing was done. Group A members did not feel ready to terminate after sixteen sessions, therefore after post-testing, they met for five additional sessions.

All parent groups were counseled by the same counselor -- a person at the doctoral level who had been trained in group counseling methods and had experience in counseling adults in groups. The counselor viewed group counseling as a process in which the discussion is primarily oriented toward the clients' feelings and attitudes towards themselves and others. The counselor considered his principal function that of understanding the client and being able to communicate this understanding to the client and the group in such a way as to promote group acceptance and solidarity and reduce the clients' defensiveness, and further, to encourage the client's self-exploration and understanding. The counseler provided information when it was requested, usually the information pertained to questions about "normal" child development and behavior. The counselor also encouraged the clients to participate as co-counselors.

Each session was well attended by fathers and mothers alike (unlike Sonstegard's (1962) where the fathers frequently were absent). Absences were almost entirely because of illness or urgent business and work obligations. Females were in attendance ninety-one per cent of the time and males were in attendance eighty-four per cent of the time. Two males were responsible for over fifty per cent of the male absences. One had an evening job and had to work every other session and the other one had surgery and his hospitalization accounted for most of his absences.

Following the termination of counseling, several parents came to the counselor for interpretation of their own as well as their children's tests. These sessions were very productive; the counselor felt that many parents left knowing themselves better and also their children, especially their children's abilities and potential achievement.

The subjects served as their "own controls" i.e., control period test scores were compared with experimental period test scores.

Three instruments were administered to the subjects on three different occasions: pre-wait, pre-counseling, and post-counseling. The instruments are described below.

Barron's Ego Strength Scale -- Measured Ego Strength Based on Parent Self Ratings

The item content of this instrument, according to Barron (1953) indicated that the strengths it measured were of the type associated with a well-functioning ego. He also contended that it was the latent ego strength which was the most important determinant (within the patient) of responses to short term psychotherapy. Several cross-validating samples led Barron to conclude that on the basis of the relationship of the scale scores to therapeutic outcomes, a significant determinant of personality change in psychotherapy was strength of the ego before therapy began. Barron, himself, suggested that this instrument may be of value in measuring the kind of change that occurs in therapy, for example, whether there is actually an increase in ego strength as a result of therapy. The instrument was employed in the present research to assess changes in ego strength made in parents who received group counseling.

The odd-even reliability obtained by Barron (1953) with an N of 126 was .76. The test-retest reliability after three months with thirty cases was .72. These measures of reliability were obtained from scores on the Barron's Ego Strength Scale taken in the context of the MMPI. In the research described herein, the MMPI was not administered; instead Barron's items from the MMPI were administered apart from it. To test whether the reliability would be affected, the research staff administered the Barron's items to a group of one hundred college juniors immediately before they took the MMPI and to another one hundred college juniors immediately after they took the MMPI. Both groups were randomly selected. A test of precentage difference showed that there was no significant difference in the way that the items were answered in or out of the context of the MMPI.

Tamkin (1957) and Tamkin and Klett (1957) concluded, based on negative correlations between Es and F scales, and between Es and CI scales on the MMPI, that construct validity was suggested for Es (ego strength scale).

Kleinmuntz (1960) found that Es distinguished beyond the .001 level between adjusted and maladjusted college students. He also found that adjusted students had significantly higher K scores on the MMPI.

The scoring system described by Barron (1953) was employed.

Behavior Rating Scale -- Measured General Adjustment Based on Self and Spouse's Ratings

The Behavior Rating Scale was developed by the junior author. Each of the seventy-three items is a description of behavior or a characteristic of a person. Each of the subjects rated himself and his spouse on a five-point scale from "this description describes me (him-her) very well," to "this description does not describe me (him-her)."

This instrument was used in an exploratory sense only in that its reliability, based on a test-retest per cent of perfect agreement, was only fifty-seven. The reliability was determined from ratings of twenty-six adults, similar to the experimental group, who repeated the test two weeks apart.

The Scale was assumed to possess content validity based on the content of the items. Previous research (Gazda and Ohlsen, 1962) using this instrument suggested that defensive subjects rated themselves higher at pre counseling than on their more realistic post counseling ratings. In order to allow for this possibility, the authors selected the defensive people and reversed the scoring procedure for these individuals. The defensive subjects were selected by the research staff on the basis of their initial interviews and test data. To cross validate the staff selections, a criterion based on the subject's initial self rating on the Scale was employed. To meet the criterion of "defensiveness," a subject's initial self rating had to deviate from the mean for the group by more than two-thirds of a standard deviation in the direction of ideal adjustment. When compared with this criterion, the staff ratings were in agreement ten out of eleven clients. The test criterion was used instead of the staff rating for the person where there was disagreement.

Picture Story Test -- Measured Acceptance of Self and Others

The Picture Story Test (PST) is a projective test consisting of six pictures selected especially for this project. The pictures were card 1 of the Michigan Picture Test, cards 2 and 13 of the TAT, and cards 1, 4, and 5 of Alexander's Adult-Child Interaction Test.

The pictures were selected to produce responses regarding family relations and interactions, heterosexual relationships, and self concerns.

The PST was administered very similar to the administration of the TAT. The test was administered to the subjects in a group by means of projecting the picture from a slide onto a portable movie screen. Each person was permitted to complete all stories but after seven minutes the slide projector was turned off. The examiner also encouraged the subjects to work rapidly and give their first impressions. By adhering to a time limit it was felt that the subjects tended to give their first impression and were less inclined to disguise their responses.

In previous research (Broedel, 1958 and Gazda, 1959) this test was shown to possess adequate reliability. Broedel (1958) obtained interscorer reliability of ninety-two per cent perfect agreement based on 932 items. Intrascorer reliability was ninety-four per cent perfect agreement based on 1,667 items. Gazda (1958) obtained interscorer reliability of eighty-seven per cent perfect agreement based on 701 items. Intrascorer reliability was ninety per cent perfect agreement based on seventy protocols.

Validity of a projective device such as the PST depends upon the subject identifying with a character in the picture and in the story he tells. The storyteller is assumed to project his own behavior and characteristics onto the characters in his story. Responses or actions by the identification figure in each story were scored for acceptance of self and others. Broedel (1958), Gazda (1959), and Zimet and Fine (1955) have used successfully this type of instrument in measuring changes (in acceptance of self and others) of subjects counseled in groups.

Results

The results of this study, obtained from the test data are summarized in Table I below:

TABLE 1

Changes Noted in Clients*

	Group A	Group B	Group C
Barron Ego Strength Scale	.05CP	.05CP	.05CP
Behavior Rating Scale			
Self Rating	NS	NS	NS
Spouse Rating	NS	NS	NS
Picture Story Test			
Acceptance of Self	.05CP	NS	.05PP
Acceptance of Others	NS	.05CP	NS
Acceptance of Self and Others Combined	.05PWP	NS	.05PWP; .05PP

*The .05 level of significance was used for all tests of hypotheses. The t test for mean differences (for correlated variables) was the test statistic employed.

NS -- non-significant change
.05CP -- significant at .05 level for the control period
.05PWP -- significant at .05 level for the period from pre-wait through post-counseling
.05PP -- significant at .05 level for the period from pre-counseling through post-counseling

---

It is difficult to account for the increase registered in ego strength during the control period. Perhaps the test is unreliable for a group of individuals who are waiting for counseling, or it may be that ego strength was increased as a result of the subjects thinking about their problems and making the decision to do something about them, and of course, it could be the effects of some environment's influence. The increased ego strength, as measured by the test, was not maintained at post-counseling.

The low stability of the Behavior Rating Scale may account for the non-significant results. Another possibility is that the test was not sensitive to the kinds of changes that the subjects did make.

The Picture Story Test data produced a few changes. Groups A and C demonstrated increased acceptance of self and others (on self and others data combined). During control period acceptance of self increased for group A and increased acceptance of others for group B suggest these changes may be accounted for by environmental factors, unreliability of the test, or changes made as a result of the subjects' having taken some action (thought about their problems and volunteered for counseling) which could contribute to acceptance of self and others for some individuals.

Discussion

The primary purpose of counseling the parents, as previously stated, was to effect changes in them which in turn would be passed along to their children in the form of better understanding, acceptance, and treatment. It was hypothesized that such changes would enable the bright underachieving fifth grade child to improve his grade-point average, acceptance of self and others, self understanding, and general personal adjustment. The results of the study reported herein show that few of the predicted changes, as measured strictly by the three tests, occurred in the parents. If the parents made few measured changes, then one would assume that their children would be generally unaffected, too. In the previous paper the children were described as making some of the predicted positive changes, such as increased congruency between perception of self and ideal self and improved behavior -- the latter based on reports by parents and teachers.

Although a strict statistical interpretation of the test data suggests little or no positive effects of group counseling on the parents in this study, other evidence suggests that they may have been helped.

For example, Mr. A used the group experience to make a decision which resulted in a job change and a whole new kind of life for him. He had known that he needed to make this change for a number of years but admitted that he got up the courage as a result of his group experience. He also reported frequent occasions of changed relations with his co-workers which resulted in improved acceptance of them and improved interpersonal relations in general.

Mr. B reported that he became strong enough from the group experience to begin to stand up for his rights and as proof demanded and surprisingly (to him) got a vacation (his first in fourteen years) that he was planning to pass up because he was too timid to ask for it. This same individual began to stand up to his wife and spend more time with his son.

Mr. C, according to his wife, began to come directly home from work and also spend more time with the family resulting in improved husband-wife relations. The time spent with a daughter was enough to involve the daughter in family activities, drawing her away from an unhealthy withdrawal into books.

Mr. and Mrs. D indicated that an improved understanding of their daughter resulted in their relaxing pressure on her which in turn resulted in the elimination of the child's nightly terror dreams.

Mrs. E, an over-protective mother, told of relaxing her restrictions and permitting her son the use of his Boy Scout axe and similar activities in scouting previously denied him.

Mrs. F reported that she gave up bathing her ten-year-old son upon the recommendations of the counselor and group members. This resulted in improved relations between the two.

Mr. and Mrs. G stated that improved understanding and treatment of their son resulted in the elimination of his asthmatic attacks which, in turn, resulted in regular school attendance. Prior to this period, their son had frequent asthmatic attacks and missed numerous days of school each year.

Unsolicited testimonials of the type described above are given little scientific credence, but perhaps they suggest the need for different methods for evaluation of outcomes of counseling. Group counseling with the type of subjects involved in this study, does not result in changes of the kind which the instruments used seem to measure. In spite of the negative results reported here, the investigators recommend additional research. However, further research alone is not enough. Certain precautions that were ignored in this study, and in the majority of studies concerned with appraising outcomes of counseling, must be heeded.

Perhaps most important is the necessity of defining criteria for growth for each client, prior to or early in treatment, and applying signed numbers or a similar technique to appraise the direction of change hypothesized. Recently this technique has been described by Ohlsen (1963). This approach would prevent the neutralizing effect of changes made in subjects when data are grouped. For example, not all subjects should be expected to decrease aggressive behavior; some subjects may need to increase their aggressive behavior to improve their adjustment. When data on an "aggressiveness" variable are combined for all subjects, changes may very easily be nullified. Edwards and Cronbach (1952) have warned, on grounds similar to those cited, against the use of general measures of adjustment. Cartwright (1957, p. 266) believes that personality change should be analyzed according to its discriminable independent components. He argues thus: "A good student with no study problems who experiences difficulty in interpersonal relations is not likely to improve his work efficiency very much as a result of counseling. He is very effective to start with. But he is likely to improve his interpersonal skills, for that is where he needs to change and can change for the better. And if he does come out with greater ease and facility in his relationships, who knows: he may even be less effective (or less compulsively effective) in his work. And 'successful counseling' for him would mean very different change in behavior from what it would for a student who started with nothing but study problems."

There is good reason to believe that the instruments used by the authors for measuring differential change in "basically normal people with problems," were not sensitive enough to detect the changes. Bereiter (1962) recently concluded that many of the tests used to measure differential changes that educational and guidance practices are supposed to produce are insensitive to these changes because the tests have been developed such as to focus on the factor of status rather than the factor of change. He described a method of test construction which focused on the factor of change.

Finally, the research design must be flexible enough to permit optimum grouping of subjects. A random assignment of members to groups defies the rules for selecting clients for group counseling. As long as between group comparisons are not to be made, random placement would not appear to be essential for meeting the assumptions required in inferential statistics. However, random selection from a defined population, (all volunteers for the project) would be necessary to meet the statistical assumptions.

Summary

Three groups of parents of pre-adolescent underachievers were counseled in groups of six, seven, and nine members each. The parents were selected first on the basis of whether or not their fifth grade child was underachieving, and secondly on the basis of whether or not the parents themselves volunteered.

All subjects served as their own controls necessitating a control period of eight weeks from the first testing of the clients until the second or pre-counseling testing. Post-testing was done eight weeks after counseling was initiated. One group, because the members did not feel ready to terminate after sixteen sessions, continued for five sessions beyond their post-testing. Measures of the effects of the short term group counseling were the Picture Story Test (a projective), Behavior Rating Scale (a self report measure of adjustment), and Barron's Ego Strength Scale.

Most of the predicted changes in clients did not occur. Unsolicited reports from group participants indicated significant improvement in family relations, which in some instances, also resulted in significant improvement of the children, e.g., elimination of one boy's asthmatic attacks and for one girl the elimination of her nightly dreams of terror.

Finally, suggestions for improving the selection and placement of group members and the improvement of research designs to measure group counseling outcomes were presented.

References

Barron, F. "An Ego-Strength Scale Which Predicts Response to Psychotherapy," Journal of Counseling Psychology, 1953, 17: 327:333.

Bereiter, C. "Using Tests to Measure Change," Personnel and Guidance Journal, 1962, 41: 6-11.

Broedel, J. W. "A Study of the Effects of Group Counseling on the Academic Performance and Mental Health of Underachieving Gifted Adolescents." Unpublished doctoral dissertation, University of Illinois, 1958.

Broedel, Jr., Ohlsen, M., Proff, F., and Southard, C. "The Effects of Group Counseling on Gifted Adolescent Underachievers," Journal of Counseling Psychology, 1960, 7: 163-170.

Buchmueller, A. D., and Gildea, Margaret, C. L. "A Group Therapy Project With Parents of Behavior Problem Children in Public Schools," American Journal of Psychiatry, 1949, 106: 46-52.

Buchmueller, A. D., Porter, Frances, and Gildea, Margaret, C. L. "A Group Therapy Project With Parents of Behavior Problem Children in Public Schools," Nervous Child, 1954, 10: 415-424.

Cartwright, D. S. "Methodology in Evaluation," Journal of Counseling Psychology, 1957, 4: 263-267.

Edwards, A. L., and Cronbach, L. J. "Experimental Design for Research in Psychotherapy," Journal of Clinical Psychology, 1952, 8: 51-59.

Gabriel, Betty, and Holpert, Anita "The Effects of Group Therapy for Mothers on Their Children," International Journal of Group Psychotherapy, 1952, 2: 159-171.

Gazda, G. M., and Ohlsen, M. M. "Group Counseling With Bright Underachieving Fifth Graders and Their Parents," paper read at APGA Convention, Chicago, April, 1962.

Gazda, G. M. "The Effects of Short Term Group Counseling on Prospective Counselors." Unpublished doctoral dissertation, University of Illinois, 1959,

Gazda, G. M., and Ohlsen, M. M. "The Effects of Short Term Group Counseling on Prospective Counselors," Personnel and Guidance Journal, 1961, 39: 634-638.

Kleinmuntz, B. "An Extension of the Construct Validity of the Ego Strength Scale," Journal of Counseling Psychology, 1960, 24: 463-464.

Ohlsen, M. M., and Schultz, R. E. "Projective Test Response Patterns for Best and Poorest Student Teachers," Educational and Psychological Measurement, 1955, 15: 18-27.

Ohlsen, M. M. Evaluation of Group Techniques in the Secondary Schools. Ithaca: Cornell University Press, 1963.

Parle, Grace "Group Therapy for Problem Parents," Journal of National Education Association, 1954, 43: 269-272.

Sonstegard, M. "Effects of Group Counseling of Parents Upon the Performance of Underachieving Elementary School Children." Paper read at APGA Convention, Chicago, April, 1962.

Tamkin, A. S. "An Evaluation of the Construct Validity of Barron's Ego-Strength Scale," Journal of Clinical Psychology, 1957, 13: 156-158.

Tamkin, A. S. and Klett, J.C. "Barron's Ego-Strength Scale: A Replication of an Evaluation of Construct Validity," Journal of Counseling Psychology, 1957, 21: 412.

Zimet, C. M., and Fine, H. J. "Personality Change With Group Therapeutic Experiences in a Human Relations Seminar," Journal of Abnormal and Social Psychology, 1955, 51: 68-73.

EMPIRICAL DERIVATION OF A SCALE FOR SELECTION OF CLIENTS FOR GROUP COUNSELING

Merle M. Ohlsen and Paul A. Wurm[1]
University of Illinois

The purpose of this study was to attempt to derive empirically a scale to be used in the selection of clients for group counseling. The investigators were interested in trying to answer the following question: can potential for growth in group counseling be determined prior to counseling?

A number of writers have answered this question on the basis of their treatment experiences with clients. For example, Stranaham, Swartzman, and Atkin (1957) concluded that those who profited most from treatment (potential delinquent boys, 13-15 years of age) had some capacity for insight, a degree of flexibility, desire for growth, and some experiences early in life with an authority figure who possessed some measure of steadiness, helpfulness, direction, and maturity. Ohlsen (1964) reported that he had best success in group counseling with clients (primarily adolescents and prospective counselors) who were aware of some problems that they wanted to discuss in a group, were willing to change, possessed the ability to empathize with others and to become ego-involved with others' problems, were capable of reaping personal satisfaction from seeing others solve their problems, and volunteered for counseling after they learned what would be expected from them in groups and how group counseling may help them. Spielberger, Weitz and Denny (1962) concluded from their work with anxious college students that group counseling was effective for only those who were able to participate fully in the therapeutic experience. In contrast Nash, Frank, Gliedman, Inber, and Stone (1957) found that most patients who rejected group therapy after a brief exposure to it had their symptoms intensified in the group. This was indicated by higher scores on the Discomfort Scales than in initial testing. They observed that those who dropped out of group therapy were more ineffective socially, irresponsible, withdrawn, and impulsive than those who accepted it.

Though he was concerned with individual therapy for psychoneurotic patients, Barron's (1953) findings also seem to be relevant. He reported that those who profited most from therapy may be characterized as functioning well physically, spontaneous, members of conventional but undogmatic churches, having good contact with reality, and possessing vitality, personal courage, and feelings of personal adequacy whereas those who profited least were characterized as having many and chronic physical ailments, brooding, worrying and being inhibited, member of dogmatic churches which teach punitive morality, tired, confused, and submissive, and possessing many phobias and infantile anxieties.

---

[1] The writers are grateful to Norman Gilbert for his assistance in developing the scoring manual.

As a first step in this process of identifying good bets for counseling, the investigators concluded that content analysis of picture stories offered most promise. The use of phantasy type measures in a psychometric manner, or as Cronbach (1960) has labeled them "focussed projectives", has been demonstrated by McClelland _et_._al_. (1953).

Procedures

The Sample

There were three groups of Parents (Gazda and Ohlsen, 1964), five groups of Counselors-in-Training (Ohlsen and Proff, 1960), four Adolescent groups (Ohlsen and Proff, 1960), and three groups of Children (Ohlsen and Gazda, 1964). For each group the two clients judged to have exhibited the most growth and the two judged to have exhibited the least growth were selected by the counselor and clinical observers of the group. These judgments were based on a combination of analysis of pre- and post-test materials, counselor judgments, and observers reactions to the counseling sessions. These "most" and "least" growth clients formed the criterion groups used in the present study.

The Instrument

The first step in the present investigation was to develop questions for content scoring the Picture Story Test (PST) used for pre-, post- and follow-up testing for these clients. This PST has been described earlier in this volume by Ohlsen and Gazda. It was felt that the scoring systems developed by McClelland _et_. _al_. (1953) would not serve adequately the purposes of the present study because most psychological "problems", at least those usually dealt with in group counseling, are infinitely more complex than a single need-state. Therefore the investigators conclude it was necessary to develop a scoring system that would be much broader in scope. For this purpose a scoring system was developed based on the criteria of positive mental health described by Jahoda (1958). Questions were written to cover each of Jahoda's major categories. In all there are twenty-one questions covering six broad areas. The complete _Manual for Content Analysis of the Picture Story Test_ is presented in the Appendix. Any given question could be scored in four ways: plus, minus, uncertain (zero), and not dealt with (X). A subject's score was computed by the following formula: 100 plus number of plus signs minus number of negative signs.

The establishment of scoring reliability of the instrument was undertaken in two steps. The first step in scoring the stories is to establish the Identification Figure of the story. Therefore, it was necessary to demonstrate high agreement on selection of the Identification Figure by independent judges. For this purpose practice scoring materials were assembled and mimeographed. These stories consisted of two complete sets of stories (pre- and post-) written by a child, an adolescent, and an adult, making a total of twenty-eight stories and requiring a total of 544 decisions from each judge.

Each of four independent raters, who were advanced doctoral candidates at the University of Illinois, was required to indicate the Identification Figures of the stories in both sets, wait for a period of at least two days, and complete the process again without reference to his original scoring. From this scoring Percentage of Agreement was computed on a score re-score basis for the four raters, and inter-rater percentage of agreement was computed on the basis of the second scoring. The obtained percentage of agreements are shown in Table 1.

TABLE 1

INTRA- AND INTER-RATER PERCENTAGE OF AGREEMENT ON ESTABLISHMENT OF IDENTIFICATION FIGURE

RATER	A	B	C	D
A	100%	93%	93%	89%
B		96	89	82
C			96	86
D				79

These percentages of agreement were accepted as adequate for the purpose of this study.

The second phase in assessing the reliability of the instrument involved the actual scoring of the questions. In this case, the intra- and the inter-rater scoring reliabilities were also computed on the basis of percentage of agreement between judges. The four raters were asked to score the stories, wait at least three days to a week, and rescore the stories without reference to their original scoring. Score-rescore reliability was computed for each rater, and inter-rater reliability was computed on the basis of each rater's second scoring. The results are reported in Table 2. (See page 32)

These agreements between judges were disappointing, especially when one considers that previous work with a similar content scoring system had always produced inter-judge agreements of at least 80 percent (Ohlsen and Schultz, 1955). Consequently, the investigators also computed rank-order correlation coefficients based upon total scores for each client. These correlation coefficients varied from .54 to .94 for intra-judge correlations and from .54 to .90 for inter-judge correlations. Though better reliabilities would have been desirable, these were accepted as adequate for a pilot study. Furthermore, it should be noted that judge A did the scoring for this study and that poorest reliabilities was obtained by judge D, the least experienced of the judges with this type of scoring system.

TABLE 2

INTRA- AND INTER-RATER PERCENTAGE OF AGREEMENT CONTENT ANALYSIS OF THE P.S.T.

RATER	A	B	C	D
A	80%	57%	63%	33%
B		92	53	35
C			80	36
D				81

Statistical Analysis

Since the instrument used was constructed specifically for this study, it is impossible to assess its usefulness by referring to previous studies. In an attempt to establish the usefulness of the instrument, at least for separating criterion groups as were used in the present study, t tests were computed to determine whether chance could account for the abnormal differences in the two groups. The results of these tests are shown in Table 3. ($\bar{X}_1$ represents most profited groups.)

SAMPLE	$\bar{X}_1$	$\bar{X}_2$	t	d.f.	P
Child	103.33	95.67	0.82	10	NS
Adolescent	100.88	105.63	-0.78	14	NS
Adult	121.56	114.44	1.35	30	NS
Total	112.40	108.33	0.95	58	NS

As can be seen in Table 3, the instrument failed to separate the criterion groups for any of the subject samples, or the total sample. Although significant differences were not obtained in Table 3, the investigators elected to compare criterion's group members' responses on each item.

The precounseling PST records written by the subjects in the "most growth" and "least growth" criterion groups were collected and scored on the basis of the Content Analysis system. An item analysis was completed on the 21 items of the scale comparing the criterion groups on the basis of their plus and minus responses to the items. This item analysis was carried out for each type of subject sample, Child, Adolescent, Adult, and by combining their responses for the Total sample.

TABLE 4

PROBABILITY VALUES OBTAINED FROM ITEM ANALYSIS OF THE P.S.T.

Item	Child	Adolescent	Adult	Total
I 1	.50	.50	.10	.05
2	.50	-	.80	.80
3	.48	.12	.10	.50
4	.10*	.42	.30	.10
5	.38	.14	.70	.40
II 1	.58	-	.10	.10
2	.14	.20	.50	.70
3	.50	.24	.50	.70
III 1	-	.57	.80	.40
2	.03*	.78	.95	.10
3	.07*	.32	.70	.10*
IV 1	.54	.40	.60	.98
2	-	-	.80	.98
V 1	.56	.67	.70	.50
2	.47	.14	.70	.70
VI 1	-	-	.60	.50
2	.23	.07*	.60	.10
3	.04*	.15	.70	.80
4	.35	.40	.20-	.30
5	.34	.16	.80	.80
6	.34	.22	.01*	.05*

*designates items for observed differences were significant at least 10% level.

Originally Phi Coefficient tested by Chi Square was to be the vehicle for the item analysis. Upon scoring the stories it was found that in the Child and Adolescent samples, there were some items that yielded zero cell frequencies. Because of this, Fisher's exact test of probability for cell arrangement was utilized for these two groups, and Chi Square, with Yates correction where necessary, for the Adolescent and Total samples (Walker & Lev, 1953). Table 4 presents the results of this item analysis; it shows the probability of the cell arrangements which could be accounted for chance factors alone. For the purposes of the present study, an item was considered to differ significantly if there were less than ten chances in a hundred that the particular cell arrangement was due to chance factors. Blank entries in Table 4 indicate items where there were zero marginal frequencies in addition to zero cell frequencies in the contingency table and therefore could not be submitted to an analysis.

Discussion of Results

As can be noted from Table 4, the largest number of items found significantly differentiating the criterion groups were found in the Total sample, and even here only five items could be so judged. It is interesting to note that the same items were not found to be differentiating in all groups, but rather the observed differences appeared to be a function of the group involved. Five items cannot be considered sufficient for a scoring key of this type. Guilford (1954) recommends that scales should consist of at least from 10 to 20 items to be adequate. Therefore, it must be concluded that the present attempt to derive empirically a scale to select clients for group counseling was not successful.

In order to help other researcher's with this problem, the investigators concluded that they should try to account for these negative results. One problem was the size of the sample: 6 children, each contributing 4 stories; 8 adolescents, each contributing 5 stories; and 16 adults, each contributing 5 stories. Another problem was the one of defining the criterion group.

The questions used for content analysis presented still another problem. These questions were more involved and required more complex judgments than those originally developed by Ohlsen and Schultz (1955) and later revised by Broedel (1958) to appraise clients' growth. Instead of using questions designed to approve clients' growth, it now appears to be rather obvious that the investigators should have designed content questions which focused attention on the specific behaviors noted by others which seemed to differentiate between those who profited most and least from group counseling. If, for example, they had tried to use Barron's (1953) findings, they would have provided at least one picture which would have encouraged clients to have the identification figure exhibiting physical courage (or withdrawing from it) and used a question such as the following for content scoring: Did the identification figure exhibit physical courage? This last point also suggests that content questions must be developed before selecting the stimulus material. Furthermore, five pictures do not seem to provide enough content for this purpose. Perhaps something like ten pictures would be needed for this purpose.

Finally, considerations must be given to the type of errors introduced by this content scoring system. This system used four categories instead of the three originally used by Ohlsen and Schultz (1955). Their three categories were (1) "+" defined for the specific question, but usually requiring nothing more than a yes answer to a very short and specific question, (2) "-" similar but for a no answer, and (3) "X" indicating that the question was not dealt with in the story. The present investigators added a fourth category: "0" to indicate that the judge was uncertain whether to score + or -. Approximately eight out of ten errors identified by these reliability studies involved the use of category 0. Where this kind of judgment is required apparently it is better to require a forced choice. Also it should be noted that the most experienced judge (B) used both category "0" and "X" significantly less often than any of the other three judges.

REFERENCES

Bach, G. R. *Intensive Group Psychotherapy*, New York: The Ronald Press Company, 1954.

Barron, F. "An Ego-Strength Scale which Predicts Response to Psychotherapy." *Journal of Consulting Psychology*, 1953, 17, 327-333.

Broedel, J. W. A Study of the effects of group counseling on the academic performance and mental health of underachieving gifted adolescents. Unpublished doctoral dissertation, University of Illinois, 1958.

Cronbach, L. J. *Essentials of Psychological Testing*, (2nd Ed.) New York: Harpers, 1960.

Guilford, J. P. *Psychometric Methods*, New York: McGraw-Hill, 1954.

Jahoda, Marie. *Current Concepts of Positive Mental Health*, New York: Basic Books, Inc., 1958.

McClelland, D. G., Atkinson, J. W., Clark, R, A., and Lowell, E. L. *The Achievement Motive*, New York: Appleton-Century-Crofts, 1953.

Ohlsen, M. M. "Counseling Individuals Within the Group Setting," Chapter 5 in *Guidance Services in the Modern School*, New York: Harcourt, Brace & World, 1964.

Ohlsen, M. M., and Proff, F. C. *The Extent to which Group Counseling Improves the Academic and Personal Adjustment of Underachieving Gifted Adolescents*, Cooperative Research Project No. 623, University of Illinois, 1960.

Ohlsen, M. M. and Schultz, R. E. "Projective test response patterns for best and poorest student teacher." *Educational and Psychological Measurement*, 1955, 15, 18-27.

Nash, E. H., Frank, J. D., Gliedman, L. H., Imber, S. D. and Stone, A. R. "Some Factors Related to Patients Remaining in Group Psychotherapy," *International Journal of Group Psychotherapy*, 1957, 7, 264-274.

Spielberger, C. D., Weitz, H. and Denny, J. D. "Group Counseling and the Academic Performance of Anxious College Freshmen." *Journal of Counseling Psychology*, 1962, 9, 195-204.

Stranahan, M., Schwartzman, C., and Atkin, E., "Group Treatment for Emotionally Disturbed and Potentially Delinquent Boys and Girls," *American Journal of Orthopsychiatry*, 1957, 27, 518-527.

Walker, Helen, and Lev, J. *Statistical Inference*, New York: Holt, Rinehart and Winston, 1953.

Directions for
The Content Analysis of the Picture Story Test,
Based Upon Jahoda's Six Categories of Criteria of Mental Health

Project on Group Counseling
University of Illinois
(10-4-62)

This method of analysis of the Picture Story Test is based on Marie Jahoda's six categories of criteria of mental health as outlined in Current Concepts of Positive Mental Health (1958). Detailed instructions for carrying out the analysis are provided below.

The initial task of the scorer is to identify in each story the Identification Figure (I.F.) of the story teller. The selection of the I.F. is made on the basis of two criteria: (1) The I.F. is usually the first character to appear in the story; (2) the I.F. is the character who is talked about most (number of times he appeared in story) and around whom the plot is constructed. If there are two or more important characters (mentioned an equal number of times) around whom the plot is constructed, select as the I.F. the one mentioned first; otherwise select the one who is mentioned most often.

In the determination of the character mentioned most a number of special cases are apt to present themselves. Included among those special cases, and the manner in which they are to be handled, are the following:

(a) Use of plural pronouns, e.g. they, them, etc. - if all of the referents indicated by the plural pronoun are readily identifiable each referent is considered to have been mentioned. If all of the referents of the plural pronoun are not readily identifiable no use is made of the pronoun in selecting the I.F.

(b) Possessive nouns and pronouns (e.g., his books, Bill's father, their game, etc.) are not to be considered in selecting the I.F. Note: father, as shown in the second example, Bill's father, is counted in determining the I.F.

Having selected the Identification Figure, the scorer is then to score in the order each of the items included in the instrument as they relate to each of the *stories told. (With the exception of items I-5 and II-3.)*

Items 1-5 and 11-3 are to be scored only once for each respondent rather than once for each story. They are to be scored after having scored all the other questions for all the stories of an individual. In other words, the scoring for thoses two items is based on having read all of the respondents stories.

Each item is to be scored in terms of the Identification Figure (hereafter referred to as I.F.) all other characters in the stories fall into a single category of significant others, and are to be considered in answering questions concerning interpersonal relations, feelings about others, etc.

Interaction may be described by the story teller as occurring in the present, as having occurred in the past, or being anticipated in the future. Dreams and expressed wishes and desires for a given interaction (except where otherwise specified), also, are scored as interactions that may be occurring in the present, that may have occurred in the past, or may be anticipated in the future. Dreaming is scored as withdrawal only when the I.F. fails to return to reality at the close of the story.

Computation of Score

The score achieved by the subject is computed in the following manner:

Step 1. Sum the number of (/) scores received by the subject as a result of scoring as indicated above.
Step 2. Add 100 to the total arrived at in Step 1.
Step 3. Sum the number of (-) scores received by the subject as a result of scoring.
Step 4. Subtract the number of (-) scores received by the subject from the number of (/) scores plus 100; i.e. subtract the result of Step 3 from the result of Step 2. The difference described represents the subject's score.

I. Attitudes Toward the Self

1. Does the I.F. possess the facility to objectively look at himself when the occasion warrants it?

Score (/) when the story presents a situation which calls for the I.F. to introspect or to call to the fore an objective picture of himself, and the I.F. is depicted as being able to accomplish this.

(-) when the story presents a situation which calls for the I.F. to introspect or to call to the fore an objective picture of himself, and the I.F. is pictured as being unable to accomplish this; or when the I.F. is depicted as dwelling upon himself excessively to the exclusion of other constructive activities.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

2. Does the I.F. have a correct self-concept?

Score (/) when the I.F. is depicted as seeing himself as others see him, i.e., when others in the story describe or draw inferences about the I.F. which are consistant with the description of the I.F. by the story teller or the I.F. himself.

(-) when the I.F. is depicted as seeing himself differently from the way others see him, i.e., when others in the story describe or draw inferences about the I.F. which are inconsistent with the description of the I.F. by the story teller or the I.F. himself.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

3. Does the I.F. accept himself?

Score (/) when the I.F. is described in such terms as cooperative, good natured, calm, peaceful, a leader, popular, free from suspicion, happy, intelligent, friendly, sincere, or if the behavior of the I.F. is so described that the scorer can infer from the story that these traits are characteristic of the I.F.

(-) when the I.F. is described as negativistic, suspicious, self-centered, selfish, tactless, a "show-off", withdrawn, stupid, delinquent, won't study, gets into trouble, unpopular, anxious, confused, feels guilty, unhappy, etc., or if the I.F. is depicted by the story teller in such a way that the scorer infers that these traits are characteristic of the I.F. Illness per se is not scored as negative.

(O) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

4. Does the I.F. seek intimacy in the forms of friendship, combat, leadership, love, and inspiration, that is, does the I.F. relate warmly and with positive affection, but dare to relate negatively, when necessary?

Score (/) when the answer is yes. (Negative affect need not be evident to score this item /).

(-) when the answer is no.

(O) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

5. Does the I.F. possess a sense of identity? (To be scored only once for each record after having read all of the stories contained in the record. Degree of consistency among the I.F.'s in the various stories is the prime consideration in scoring this item.)

Score (/) when the I.F.'s are depicted in such a manner as to suggest that a consistency retains between their drives, endowments and opportunities;

or, when a consistency retains among the I.F.'s of the stories told.

(-) when the I.F.'s are depicted in such a manner as to suggest that there are inconsistencies between their drives, endowments and opportunities;

or, when little consistency is apparent among the I.F.'s of the stories told.

(O) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

II. Growth, Development, and Self-Actualization

1. Does the I.F. exhibit motivation to activity beyond that which is necessary for survival in this culture?

   Score (/) when the I.F. is depicted as participating in or planning activities of a positive nature which are over and beyond those necessary for survival in this culture, e.g. concerts, plays, or athletic events; personal reading; games; helping others; pursuing long-range goals; activities which are not required of the individual.

   (-) when the I.F. is depicted as participating in only those activities which are required and necessary for survival in this culture.

   (0) uncertain - not clearly / or -.

   (X) when the question is not dealt with in the story.

2. Does the I.F. exhibit an investment in living?

   Score (/) when the I.F. is depicted as being strongly ethical and possessing definite moral standards;

   or, when the I.F. is depicted as having warm, profound interpersonal relations;

   or, when the I.F. is depicted as having concern for others.

   (-) when the I.F. is depicted as possessing no ethical or moral standards;

   when the I.F. is depicted as having cold, distant interpersonal relations;

   when the I.F. is depicted as having no concern for others.

   (0) uncertain - not clearly / or -.

   (X) when the question is not dealt with in the story.

3. Does the I.F. participate in a variety (2 or more) of activities which are over and beyond those necessary for survival in this culture? An example would be going to a play in one story and attending a football game in another. Attending a football game in one and a baseball game in another is not considered variety as they are both athletic events. (To be scored only once for each record after having read all of the stories contained in the record.)

   Score (/) when the answer is yes.

   (-) when the answer is no.

   (0) uncertain - not clearly / or -.

   (X) when the question is not dealt with in the story.

III. Integration

1. Does the I.F. possess a balance of psychic forces?

Score (/) when the I.F. is depicted as possessing a balance between the ego, superego and id, or unconscious, preconscious and conscious; or when the I.F. is depicted as adjusting readily to situations;

or, when the I.F. is depicted as foregoing certain tendencies in favor of others of greater use to himself; that is, when the I.F. is depicted as being able to forego immediate pleasures in favor of long-range goals.

(-) when the I.F. is depicted as having an imbalance between the ego, superego and id, or unconscious, preconscious; and conscious;

or, when the I.F. is depicted as being rigid and unable to adjust to situations:

or, when the I.F. is depicted as giving in to certain tendencies regardless of their use to himself, that is, when the I.F. is depicted as deserting long-range goals for the satisfaction of immediate needs.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

2. Does the I.F. possess a unifying outlook on life?

Score (/) when the I.F. is depicted as possessing a feeling that there is a purpose and meaning to life, as evidenced by discussing a philosophy of life, i.e. religion, esthetics, etc.; of the establishment and pursual of long-term goals;

or, when the I.F. is depicted as possessing character and integrity of an ethical nature.

(-) when the I.F. is depicted as centering entirely on the present while possessing no long-term unifying outlook against which to view the immediate concerns;

or, when the I.F. is depicted as being devoid of character and integrity of an ethical nature.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

3. Is the I.F. resistant to stress?

Score (+) when the I.F. is depicted as being able to satisfy impulses in a manner acceptable to others, including suitable sublimation and delay of gratification;

or, when the I.F. is depicted as being able to adapt to the day to day ups and downs of life, to experience anxiety and frustration without detrimental effect.

(-) when the I.F. is depicted as being in conflict with himself or others over impulse satisfaction;

or, when the I.F. is depicted as being unable to cope with the day to day ups and downs of life effectively, i.e., presents psychopathological symptomology.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

IV. Autonomy

1. Is the I.F.'s behavior regulated from within?

Score (+) when the I.F. is depicted as possessing a set of stable, internalized standards which serve to regulate his behavior;

or, when the I.F. is depicted as possessing self-respect, and confidence and reliance upon himself.

(-) when the I.F. is depicted as possessing no stable, internalized standards with which to regulate behavior;

or, when the I.F. is depicted as not respecting himself, and showing little or no confidence or reliance upon himself.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

2. Does the I.F. exhibit independent behavior?

Score (+) when the I.F. is depicted as exhibiting a balance between dependent and independent behavior, i.e. undertaking tasks and activities by himself in keeping with his capacities, and seeking assistance from others on tasks which are beyond his capacities;

or, when the I.F. is depicted as being relatively stable, i.e., maintaining oneself without major upheaval in the face of hard knocks, blows, deprivations, and frustrations.

(-) when the I.F. is depicted as seeking help on tasks well within the scope of his capabilities, or when he is depicted as attempting tasks behond his capacity or refusing help on such tasks;

or, when the I.F. is depicted as being unduly upset in the face of hard knocks, blows, deprivations, and frustrations.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

V. Perception of Reality

1. Is the I.F. free from need-distortion?

Score (/) when the I.F. is depicted as seeking and accepting objective evidence and cues in the formation of perceptions.

(-) when the I.F. is depicted as distorting his perception as a result of his wishes, fears, etc.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

2. Is the I.F. empathic - socially sensitive?

Score (/) when the I.F. is depicted as correctly interpreting the attitudes and intentions of others, of perceiving situations from their point of view; or, when the I.F. is depicted as trying to see things as others see them.

When the I.F. is depicted as treating the inner lives of others as worthy of concern and attention.

(-) when the I.F. is depicted as perceiving things unlike others;

or, when the I.F. is depicted as refusing to be concerned with the inner lives of others.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

VI. Environmental Mastery

1. Does the I.F. have the ability to love, i.e. experience sexual gratification (in a broad sense) with a loved partner of the opposite sex?

Score (/) when the answer is yes.

(-) when the answer is no.

(0) uncertain - not clearly / or -.

(X) when the question is not dealt with in the story.

2. Does the I.F. exhibit adequacy in day to day functioning?

Score (/) when the I.F. is depicted as carrying on essential biologic function, i.e. eating, sleeping, excreting, etc., without any sense of disturbance;

or, when the I.F. is depicted as being able to play - to relax after work and enjoy the usual opportunities for recreation (pleasure);

or, when the I.F. is depicted as being able to work and create within his limitations, have a family, and stay out of trouble with the law.

(-) when the I.F. is depicted as experiencing difficulty in carrying on any of his essential biologic functioning;

or, when the I.F. is depicted as being unable to relax after work and enjoy the usual opportunities for recreation (pleasure);

or, when the I.F. is depicted as being unable to hold a job, unable to maintain a family, or has difficulty with the law...

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

3. Does the I.F. exhibit adequacy in interpersonal relations?

Score (+) when the I.F. is depicted as working with others for a mutual benefit, or for another's welfare;

or, when the I.F. is depicted as having secure, affectionate, warm, satisfying interpersonal relationships.

(-) when the I.F. is depicted as rejecting or withdrawing from an opportunity to promote another's welfare, or work with another for mutual benefit;

or, when the I.F. is depicted as having a need to dominate other people, lord it over them or push them around.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

4. Does the I.F. meet situational requirements?

Score (+) when the situational requirements are clearly defined, and the I.F. is depicted as meeting those requirements, i.e. in a school setting three requirements would be (a) possessing good authority (teacher) relations, (b) possessing good peer relations, and (c) acquiring knowledge and skills.

(-) when the situational requirements are clearly defined, and the I.F. is depicted as not meeting those requirements.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

5. Does the I.F. exhibit adequate adaptation and adjustment, i.e. proper balance between the active and passive components of his arrangement with the environment?

Score (+) when the I.F. is depicted as effectively carrying on the roles and tasks presented to him.

(-) when the I.F. is depicted as being ineffective in carrying on the roles and tasks presented to him.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

6. Does the I.F. exhibit facility for problem solving?

Score (+) when the I.F. is depicted as acknowledging a problem, or giving evidence of awareness of a problem;

or, when the I.F. is depicted as making active effort to deal with his problems;

or, when the I.F. is depicted as approaching his problems directly, i.e. attacking the problem at its source;

or, when the difficulties and frustrations faced by the I.F. have been or are being overcome and/or the future is seen with hope and confidence.

(-) when the I.F. is depicted as refusing or being unable to acknowledge the presence of a problem;

or, when the I.F. is depicted as denying the existence of problems, or not making any concerted effort to deal with his problems;

or, when the I.F. is depicted as approaching his problems indirectly, i.e. seeking substitute satisfaction, etc.;

or, when in the outcome of the story the I.F. remains frustrated and in conflict, feels guilt or anxiety, or if the outcome is undesirable from the viewpoint of the I.F.

(0) uncertain - not clearly + or -.

(X) when the question is not dealt with in the story.

DISCREPANCIES IN CLASSIFYING AFFECT FROM TAPE RECORDINGS[1]

Merle M. Ohlsen and Paul M. Lerner
University of Illinois

Today teachers and teacher educators as well as student personnel administrators and counselors are conducting research concerned with the study of interpersonal behavior. Even those concerned primarily with cognitive aspects of learning are beginning to take account of emotional interaction in making content analysis of tape recordings of classroom discussions. They realize that they must take account of affect (feeling tone) and that an individual's behavior is determined by both the situation and what each individual brings to that situation.

For a long time clinicians have known that a person often says one thing and feels another. They also have known that a person's nonverbal behavior often reveals his underlying feelings. Consequently, those concerned with understanding human behavior within counseling groups have stressed the importance of studying non-verbal behavior (Barbara, 1956; Berger, 1958; Bion, 1952; Joel and Shapiro, 1949; and Katz, Ohlsen, and Proff, 1959).

This study tries to determine when researchers must make a record of the non-verbal as well as the verbal behavior in order to study adequately interpersonal behavior. To achieve this goal, this study investigates the extent and nature of errors made by observers when they attempt to classify affect from only tape recordings of group counseling sessions. Errors were determined by comparing the results obtained from tape recordings with those obtained from kinescopes of these same counseling sessions.

Pioneer work in the analysis of the recorded interviews was done by Rogers (1942), Covner (1942), and Porter (1943). The system for classifying affect used in this study was based upon the work of Raimy (1948), Sheerer (1949), Snyder (1945, 1947), and Stock (1949). Snyder's system originally included three categories: positive, negative, and ambivalent affect. Wigell (1960) revised these categories and added two additional ones: no affect and ambiguous. For three judges classifying affect independently, he obtained the following range of percentage agreement between pairs of judges 75.8 to 78.8.

Procedure

Tape recordings and kinescopes were analyzed for all of the sessions for each of two groups of gifted, underachieving ninth graders: A--one of three groups which made significant growth and B--the one group out of a total of four which failed to make significant growth (Broedel, Ohlsen, Proff, and Southard, 1960).

---

[1] This paper was published in Fall, 1962 issue of Journal of Student Personnel for Teacher Education.

Initially the observer (the junior author) utilized a typescript to divide all interactions for each session into action units. An action unit was defined as a complete sentence or a clause containing a subject and a verb. Once a speaker got the floor, however, the affect for his entire discussion was assumed to be sustaining over all subsequent action units, unless there was some obvious change in affect. When the continuity of a speaker's discussion was interrupted by another, the affect of subsequent units was classified to agree with the original affect, unless it was noticeably influenced by the other's comments.

Wigell's affect categories were used in this study. They were defined as follows: P (positive)--behavior suggesting acceptance, affection, agreement, approval, comfort, compliance, concurrence, enjoyment, freedom from anxiety, freedom from worry, friendliness, happiness, pleasure, relief, satisfaction, solidarity, support for and contributing to another's status or warmth; N (negative)--behavior suggesting anger, antagonism, anxiety, attack, criticism, derogation, discomfort, dissatisfaction, fear, hate rejection, tension, withdrawal, or withholding of help; Av (ambivalent--behavior suggesting conflict of positive and negative attitudes--both exhibited at the same time with reference to the same object, idea, or person; Ag (ambiguous)--behavior which was too vague or unclear to classify affect; O (no affect)--no discernible affect detected--a factual or descriptive statement; and X (unclassifiable)--unintelligible recording--either poor recording or too many talking at once to detect and classify affect.

Each tape was played three times. During the first appraisal, the entire session was heard without an attempt to classify affect for each action unit. This enabled the observer to obtain a global picture of the atmosphere permeating the entire session, as well as sensitize himself to particular aspects of the sessions. When the tapes were played the second time, affect was classified. The third playing of the tapes enabled the observer to recheck his classifications and focus special attention upon the difficult classification units.

Two months later for group A, and fourteen months later for group B, the affect was classified using kinescope (along with typescripts) instead of tape recordings. Each session was viewed three times in the manner described above.

To assess independent agreement between judges a school counselor, (the junior author) and a third-year graduate trainee in clinical psychology classified four counseling sessions: the counselor analyzed the tapes first then viewed the kinescopes after a waiting period of two months. The psychologist reversed the order.

Results

For the discussion purposes the results obtained will be presented in four parts: (1) agreement between judges; (2) the extent to which judgments from tape recordings agreed with judgments from kinescopes; (3) the types of errors made; and (4) the extent to which the percentage of errors for each category was consistent from group to group.

Agreement Between Judges

The results are presented in Table 1. (see page 50) As predicted, the highest agreement between judges was noted when both viewed kinescopes, and the lowest agreement was noted when both judges classified affect from tape recordings.

Agreement Between Media

Only when the separate classification of affect, determined from the two different media, for a given action were identical was there said to be agreement between media. The highest agreement between media for a single session for group A was 86% and the lowest 78%. As indicated in Table 2 (see page 50,) the average agreement for all action units for group A was 83%. A standard deviation of 2.4 also attests to the consistency of agreement from session to session.

Similar high agreement between media was obtained for group B. The highest level of agreement for a single session was 86% and the lowest was 77%. Here, too, a low standard deviation (2.9) affirms the consistency of agreement from session to session.

Types of Errors

Because people often say one thing and feel another, the investigators predicted that the most common error would be to classify positive affect as negative affect and vice versa. This did not prove to be the case. Table III (see page 51,) summarizes the percentage of errors for both groups. For example, there were 1573 disagreements between media for the 9,270 action units for the sixteen sessions for group A; the first figure was used as a base in computing the percentage of error for each category. The data in Table III indicate that for both groups the N-O category (behavior classified as negative affect on tapes and as no affect on kinescopes) contributed to the largest number of errors. With very few exceptions, analysis of the errors session by session also supported the pattern presented in Table III; the majority of the errors were contributed by either N-O or P-O and the least common errors were P-N or N-P.

Consistency of Errors Across Groups

Using the percentages reported in Table III, it is easy to see that the percentage of error for each category followed a similar pattern in both groups. A rank-order correlation coefficient of .83 was obtained.

Discussion

In spite of the differences in therapeutic climate within these two groups, the observer was able to obtain high agreement between media in classifying affect. If it is important to take account of non-verbal behavior, how can one account for these results? An obvious answer is that the observer remembered how he classified affect previously. Even with a lapse of only two months, it is unlikely that he remembered how he classified over nine thousand behaviors. Anyway, he did as well after fourteen months as he did after two months. Furthermore, the agreement obtained between judges using both the same and different media suggests that the system was highly effective even when put to this severe test.

Another explanation is that the typescript was a common denominator which had a marked influence on both judgments. Several studies support this explanation. Borke and Fiske (1957) found that reading interview statements produced as accurate predictions as face-to-face interaction with the client. Grigg (1958) reported that the script condition, with the absence of voice cues, was associated with the most accurate prediction of the subject's Q sorts and responses on the Gough ACL. Luft (1951) reported that students who read typescripts did as well in predicting a subject's responses on the Bell as did the students who listened to the tape recordings.

An explanation for another aspect of the results is peculiar to clients of this age. Frequently, these youngsters had to raise their voices to get the attention of the group. Listening to tapes, both observers were inclined to assign negative affect to this behavior, but when they were able to observe the non-verbal behavior associated with the verbal content, they usually classified this behavior O instead of N. It is very likely that these sources of disagreement would disappear with adult clients who have better self control, better acceptance of social mores, and better resources for obtaining the floor. It is also possible that a teacher may make this same kind of error and take offense at behavior which pupils never intended to be hostile.

What are the implications of this study for research concerned with the classification of affect? Affect can be quite reliably classified from tape recordings. If further research supports the extent and nature of errors found in the study, a correction formula could be developed to apply to data obtained from tape recordings. However, to utilize this type of correction formula, the investigator would have to determine the generalizability of the correction formula to his data. This implies that the investigator must determine the common sources of error for his data, i.e., what proportion of the errors are contributed by the observer, by the various types of pupils, by the particular affect category, by the related topic, or by the interaction of two or more of these variables. By identifying the sources of error, the investigator can then determine the generalizability of his correction formula.

How may tape recordings be used by a counselor, a teacher, and/or researcher? Use of these affect categories in analyzing tape recordings should enable teachers, teacher-educators, administrators, and counselors to reliably classify affect associated with verbal interactions. For best results, however, affect and topic should be classified simultaneously. For example, the statement "I don't need my parents" could be classified as either positive affect or negative affect. If the topic were parents, then the statement could be described as hostility toward parents, and the affect would be classified as N. If, however, the topic were self, then this statement could be interpreted as an affirmation of independence, and the affect would be classified as P.

When is a record of non-verbal behavior needed to study the counseling or teaching process? Though a record of non-verbal behavior contributed little to accurate classification of affect in this study, Ohlsen and Oelke (1962) found that it was essential to identify the speaker in a study in which they investigated the relationships among topic, speaker, and affect. In another one of the Illinois studies on group counseling, investigators are currently classifying roles played by the principal actor and assessing other members' reactions to these roles. Here, as in many studies of the learning process, a video record is needed both to identify the principal actor and to assess other's reactions to the person who assumes the principal actor's role. Preliminary impressions gleaned from the current study suggest that clients, as well as the counselor, use non-verbal as well as verbal cues in reacting to each other. If, therefore, those who are interested in study of group process are going to take account of all the data used by members of the group, they must analyze the non-verbal behavior too.

Summary

This paper attempted to determine how frequently affect is classified correctly using only tape recordings, and to identify the most common types of errors made. Sessions from two groups were classified by two media: kinescopes and tape recordings. The affect categories used were positive affect, negative affect, no affect, ambivalent affect, and ambiguous affect.

For group A the average percentage of agreement for a judge using tape and kinescopes for all sixteen sessions was 83%; the highest level of agreement was 86% for a single session, and the lowest level of agreement was 78%. The average percentage of agreement for group B was 82% with the highest level of agreement 86% and the lowest level of agreement 77%.

For both groups, contrary to expectations, the most common errors were: N on tape was classified as O on kinescopes and P on tapes were classified as O on kinescopes. However, this may be in part at least a function of the clients' immaturity. Frequently, when they raised their voices to capture the attention of the group, the behavior was assigned negative affect from tapes, but was assigned no affect from kinescopes. This finding may be relevant for high school teacher as well as those who use tape recordings to study either the counseling process or the teaching process.

It was also noted that cetain errors which were made in classifying affect N on tapes as P on kinescopes and P on tapes as N on kinescopes seemed to be a function of the topic discussed. Therefore, it was suggested that affect and topic should be classified simultaneously.

TABLE 1

Percentage of Agreement Between Judges

Session Group A	Total Action Units	% of agreement both observers using tapes	% of agreement psychologist using tapes and counselor using kinescopes	% of agreement psychologist using kinescopes, counselor using tapes	% of agreement both observers using kinescopes
5	269	73%	77%	76%	83%
11	353	76%	81%	83%	87%
12	412	76%	81%	79%	84%
15	258	72%	78%	78%	84%
mean	323	74%	79%	79%	85%

* *

TABLE II

Percentage of Agreement Between Media

Group	Total* Number of Sessions	Total Number of Action Units	Percentage of agreement between tape recordings and kinescopes
A	16	9,270	83%
B	15	4,555	82%

TABLE III

Percentage of Error Contributed by Each Type of Error

Group	O-Tapes N-Kines.	O-Tapes P-Kines.	N-Tapes P-Kines.	N-Tapes O-Kines.	P-Tapes O-Kines.	P-Tages N-Kines.
A	17%	9%	6%	36%	25%	7%
B	13%	9%	15%	28%	27%	8%

REFERENCES

Barbara, D. A. "The Value of Non-verbal Communication in Personality Understanding," *Journal of Nervous and Mental Diseases*, 1956, 123, 286-291.

Berger, M. M. "Non-verbal Communication in Group Psychotherapy," *International Journal of Group Psychotherapy*, 1959, 8, 161-177.

Bion, W. R. "Group Dynamics: A Review," *International Journal of Psychoanalysis*, 1952, 33, 235-247.

Borke, Helen and Fiske, D. W. "Factors Influencing the Prediction of Behavior from Diagnostic Interview," *Journal of Consulting Psychology*, 1957, 21, 78-80.

Broedel, J., Ohlsen, M., Proff, F., and Southard, C. "The Effect of Group Counseling on Gifted Underachieving Adolescents," *Journal of Counseling Psychology*, 1960, 7, 83-90.

Covner, B. J. "Studies in Phonographic Recordings of Verbal Materials: I. The Use of Phonographic Recordings in Counseling Practice and Research," *Journal of Consulting Psychology*, 1942, 6, 105-113.

Grigg, A. E. "Experiences of Clinicians, and Speech Characteristics and Statements of Clients, as Variables in Clinical Judgments," *Journal of Consulting Psychology*, 1958, 22, 315-319.

Joel, W. and Shapiro, D. "A Genatypical Approach to the Analysis of Personal Interaction," *Journal of Psychology*, 1949, 28, 9-17.

Katz, Evelyn W., Ohlsen, M. M., and Proff, F. C. "An Analysis Through Use of Kinescopes of the Interpersonal Behavior of Adolescents in Group Counseling," *The Journal of College Student Personnel*, 1959, 1, 2-10.

Luft, L. "Differences in Prediction Based upon Hearing vs. Reading Verbation Clinical Interview," *Journal of Consulting Psychology*, 1951, 15, 115-119.

Ohlsen, M. M. and Oelke, M. C. "An Evaluation of Discussion Topics in Group Counseling," *Journal of Clinical Psychology*, 1962, 18, 317-322.

Porter, E. H. "The Development and Evaluation of a Measure of Counseling Interview Procedures: I. The Development," *Education and Psychological Measurement*, 1943, 3, 105-126.

Raimy, V. C. "Self References in Counseling Interviews," *Journal of Consulting Psychology*, 1948, 12, 153-163.

Rogers, C. R. "Electrically Recorded Interviews in Improving Psychotherapeutic Techniques," *American Journal of Orthopsychiatry*, 1942, 12, 429-435.

Sheerer, Elizabeth T. "An Analysis of the Relationship Between Acceptance of and Respect for Self and Acceptance of and Respect for Others in Ten Counseling Cases," *Journal of Consulting Psychology*, 1949, 13, 169-175.

Snyder, W. W. "An Investigation of the Nature of Non Directive Psychotherapy," *Journal of General Psychology*, 1945, 33, 193-223.

Snyder, W. W. "A Comparison of One Unsuccessful With Four Successful Non Directive Counseled Cases," *Journal of Consulting Psychology*, 1947, 11, 38-42.

Stock, Dorothy, "An Investigation Into the Interrelations Between the Self-Concept and Feelings Directed Toward Other Persons and Groups," *Journal of Consulting Psychology*, 1949, 13, 176-180.

Wigell, W. W. *A Content Analysis of Group Counseling Sessions with Gifted Underachieving Ninth Grade Students*, Unpublished doctoral dissertation, University of Illinois, 1960

A METHOD FOR THE CLASSIFICATION OF GROUP INTERACTION, AND ITS USE TO EXPLORE THE INFLUENCE OF INDIVIDUAL AND ROLE FACTORS UPON THE GROUP PROCESS

Merle M. Ohlsen and Richard Pearson[1]

The purpose of this study was to develop and test the effectiveness of a method for the classification of roles used by principal actors[2] in counseling groups and the reactions of group members to these roles. Secondarily, this study sought to use this method to examine the group behavior of a counseling group made up of bright, underachieving fifth grade students. It was hoped that the development and application of this method for the classification of group interaction would provide information useful to counselors and others who are interested in understanding the forces at play in the group situation and utilizing these forces to increase group effectiveness.

Many studies in the area of individual counseling and psychotherapy have explored the effect of the therapist's personal characteristics and behavior, verbal and nonverbal, upon the client, as well as the therapist's reactions to client behavior (5, 7, 9, 12). However, when group counseling and psychotherapy research is viewed, one discovers a lack of comparable investigation. Perhaps this is a function of the fact that the group setting multiplies the complexities of tracing interaction between individuals which are intricate even in the individual counseling or therapy setting. However, the lack of this sort of study is seen as surprising inasmuch as one of the oft-mentioned advantages of group counseling and psychotherapy is that the group setting offers an opportunity for multiple interaction among individuals, an opportunity for the individual to receive multiple feedback concerning the effects of his behavior upon other people (6). Also, it is often asserted that in an effective group the counselor's role and function are shared by members of the group. The present investigators have not, however, been able to discover any systematic investigation into the relationships between the verbal contributions of individuals in counseling or therapy groups and the reactions of other group members to these contributions. If indeed, individuals, as members of the counseling group, are therapeutic agents, would not the knowledge of the relationship between an individual's verbal statements and the reactions of other group members to these contributions be useful information, valuable to the understanding of the therapeutic nature of groups? This study was undertaken in the expectation that the development and use of the present method of classifying group interaction could make some progress toward providing this information. Specifically, the following questions were examined:

1. Do members of a counseling group, as a group, show significant differences in the extent to which they use the various response roles included in the present classification system?

---

[1] The present investigators wish to acknowledge the pilot work done by Dr. William Lewis and Dr. Harold De Weese in helping develop the classification system.

[2] For the purposes of this study the term "principal actor" refers to that individual who is the center of the group's attention at any given time. Usually he is the speaker; however, occasionally he attracts their attention by his nonverbal behavior.

2. Does the total group show significant difference in the way it responds to general use of the different principal actor roles included in the present classification system?

3. Do individual group members show significant differences in the way they respond to general use of the various principal actor roles?

4. Does the group show significant differences in the way it responds to different individuals using the same principal actor roles?

METHOD

Classification of Group Interaction

1. Principal Actor Roles: this part of the interaction analysis had as its purpose the recording and classification of the verbal statements of those individuals who, at any given time, were the center of group attention (such individuals were called principal actors, and their statements were classified by use of a system of principal actor roles).

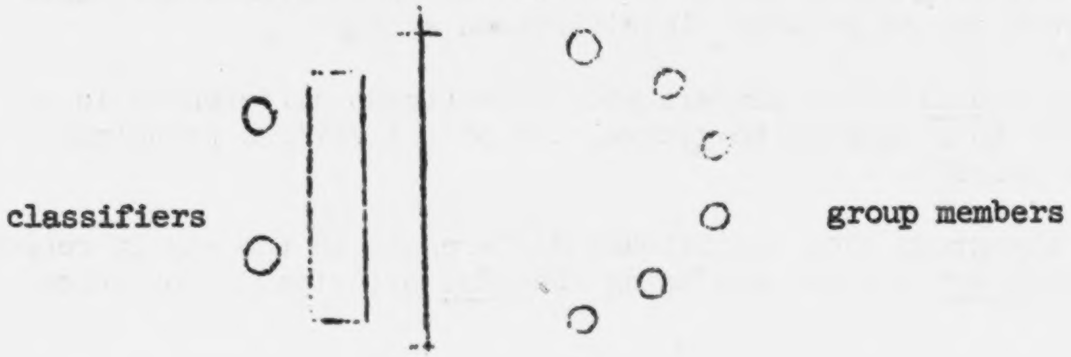
   The system of principal actor role classification which was used is that developed by Apostal, Ohlsen and Proff (2) which in turn was based on work done by Benne and Sheats (4). Essentially, this system for the classification of principal actor roles can be seen as a method of specifying the intent or purpose served by the individual's communication to the group. It is made up of 28 categories into which the principal actors' statements are classified (see pp. 66 to 68).

2. Response Roles: the method of classifying modes in which other members of the group respond to the principal actor has its basis in the theory of Horney (8) that interpersonal relationships can be characterized as: 1) moving toward others; 2) moving away from others; and 3) moving against others. For the purposes of classification of response behavior which is often indirect and nonverbal in its expression, it was necessary to add the category of "passive attendance" to cover those instances in which the respondent does not fall clearly into one of the other, more clearly discernible categories. Essentially, this part of the classification system represents an attempt to describe the ongoing backdrop of individual and group reaction to one's behavior in the group. It is this backdrop of reaction which provides the individual member of the group with "feedback" information concerning his own behavior and the behavior of others, and thus represents one of the most potent forces in the group situation (see pp. 69 to pp. 70).

   By means of the addition of response classification to principal actor role classification, it was possible to trace the reaction of each member of the group (other than the principal actor himself) to each contribution of each principal actor. Thus if individual I, as principal actor, gives advice to another member of the group (principal actor role Ga) the classification system allows one to trace how each of the other members reacted to this contribution.

Mechanics of the Classification Process

The following diagram represents the physical setup which was used for the classification of group interaction



Two raters, (one of whom was responsible for identifying and classifying the contribution of the principal actor. The other being responsible for the classification of the responses of the other group members) were seated behind a two-way mirror. From their vantage point all members of the group were clearly visible and a sound system made it possible for them to hear virtually everything that was said. Classification was made on interlocking forms (see p. 70 which insured that the classification of each principal actor's contribution could clearly and unequivocally be linked to the responses of the other group members. The process required a degree of facility and co-operation which is difficult to capture in words, but generally the process worked something like this:

> Principal actor classifier: "Individual A on number 20" (This indicated that individual A had been identified as the principal actor and that his contribution was being classified in space 20 on the Principal Actor Rating Sheet).
>
> Response classifier: "Right" (This indicated that the response classifier was recording the reactions of the other members of the group in space 20 of his Response Rating Sheet).
>
> If the same principal actor changed roles, the principal actor rater would say:
>
> > "Take him down to 21"
>
> He would then record his new role in space 21 on his sheet and the response rater would record the responses to this new role.

In practice it was found that the most frequent response role was passive attendance, it being used about 60 per cent of the time. As a result, the response rater found it expeditious to record only departures from passive attendance. This allowed him time to keep his eyes on the group interaction. Anyone who has witnessed counseling or therapy groups can appreciate the rate at which this classification process was often forced to move. However, a thorough training period for each of the raters and ample opportunities to practice working together before classification was actually begun, sufficed to make it possible to carry out classification with a minimum of lapses or breakdowns. Training was done by means of kinescoped group counseling sessions. While the quality of sound and vision presented certain difficulties to the classifier, the kinescope as a training device had the advantage of allowing the classifier to stop the action to discuss problems or work out disagreements.

Population

The group upon which the analysis was made consisted of seven fifth grade students, enrolled in schools in communities surrounding the University of Illinois, who met the definition of "bright underachievers."

In all cases the parents of fifth grade students were contacted, the group counseling program and its aims described an opportunity extended for their children to become part of the study. The final group consisted of three girls and four boys. A similar group of students was formed, made up of students meeting the same criteria, and this group provided a method for rough cross-validation of the results, and will serve as a source of future investigations.

Treatment

The group counseling sessions were carried out in the setting of a university research building. Twenty-one sessions were conducted over an 11 week period. The counselor was an individual with wide experience (both in terms of practice and research) in the field of group counseling. His view of the group counseling process can be described as: The students talk frankly about themselves and the other important individuals in their lives. The student members of the group try to understand the speaker and help him talk about the problems that bother him. Though it seems to be important for the counselor to select for group counseling adolescents who have similar problems, each client learns early, in a successful group, that he can discuss whatever bothers him. In group counseling, each student is given an opportunity to discuss and appraise his perception of himself, his situation, and the various ways he may attack his problems and to obtain reaction from an accepting group of peers prior to taking action. Generally, throughout the counseling period the emphasis was put on helping the students talk about and deal with the things which bothered and concerned them, rather than focusing strictly upon underachievement.

An idea of the counselor's technique can be obtained by pointing out that approximately 75 per cent of his verbal contributions fell into the following seven principal actor role categories:

1. clarifier (Cli and Clid)
2. giver of information (G)
3. interpreter (Ii)
4. opinion seeker (Os)
5. information seeker (Is)
6. expeditor (Ex)
7. reflector (R)

RESULTS

The Classification System

The question of whether or not the group interaction classification system which was developed for this study was usable was answered through the simple expedient of putting it to use. The classifiers found that in all but the most unorganized moments of group interaction it was possible to identify the principal actor, classify the role he was using and record the reactions of the other group members to his contribution. They found that they were able, through the techniques described under Method, to coordinate and keep together the two parts of the classification system (i.e., principal actor role classification and response role classification).

However, the mere workability of a classification system does not necessarily insure its validity. Since validity checks (like the classification process itself) were made on live, on-going group counseling sessions, interjudge agreement was the chief method used. Two judges, both of whom were advanced doctoral students in educational psychology, were able to achieve agreement ranging from 72% to 93% for the principal actor roles which were finally used in the study. Chief disagreement occurred initially with regard to roles Ii and Cli-Clo. With respect to the response roles, percentage of interjudge agreement ranged from 76% for Attack to 87% for Passive Attendance.

Admittedly, these levels of agreement are not perfect, however, when it is realized that these results were achieved on classification which were made of live counseling sessions they assume, in the present investigators' opinion anyway, more acceptability. For future research they recommend the use of video tape recordings.

It is felt that the mechanics and methodology of classification which were developed represent an important innovation in the study of live, on-going group interaction.

Questions

1. Do members of a counseling group, as a group, use to different extents the response roles included in the present classification system?

   This question was investigated by means of Chi-square. Total number of responses falling in each response role category, for all individuals, across all sessions were computed. The observed frequencies were compared to the theoretical "equal" frequency in each category. The resulting Chi-square value was 1565.5 which is significant in excess of the .001 level, d.f. equal to 3.

   The answer to this question is that the group as a whole did use the different response roles to varying degrees. In terms of percentages, the roles were used as follows:

Passive attendance	68%
Withdrawal	15%
Approach	10%
Attack	7%

The predominance of the use of Passive Attendance, of course, accounts for the enormous Chi-square value obtained. The question might be raised, "When the members depart from Passive Attendance, is there any difference in the degree to which they use the remaining three response categories?" Again, Chi-square can be used to compare observed with a theoretical equal frequency. The computed Chi-square value equals 442.41 which again is significant in excess of the .001 level (d.f.2). These results indicate that in their departure from Passive Attendance the members of the group used the remaining three response categories to different extent.

2. Does the total group show significant difference in the way it responds to general use of the different principal actor roles?

This question was investigated by means of double classification analysis of variance. It was found that of the original 28 principal actor roles included in the classification system, only 11 (G, A, CX, Cli, Ii, Rp, Rs, Is, Ga, Clo, Hs) were used with sufficient frequency by each member to assure reliability of results. Initially, for each of these 11 principal actor roles the percentage of group response falling in each of the four response role categories was computed. Then, these percentages were converted to normally-distributed arc-sine values by means of Snedecor's (13) tables, thus permitting the use of parametric statistics. Data for the analysis consisted, then, of the percentage of group response (converted to arc-sine values) falling into each response category, for each of the 11 principal actor roles used. In the analysis of variance matrix, the rows represented the principal actor roles and the columns represented the response roles.

The results of the analysis are shown in Table I. These results suggest that while the group showed highly significant differences in its use of response roles (a finding that is in agreement with those for Question 1) there were no significant differences noted between principal actor roles with respect to the amount of group response falling in each response role category.

TABLE I: ANALYSIS OF VARIANCE TO DETERMINE DIFFERENCE IN GROUP USE OF THE RESPONSE CATEGORIES AMONG THE VARIOUS PRINCIPAL ACTOR ROLES

Source of variation	Sum of Squares	d.f.	Mean Square	F.	F.01	P
Total	11892.57	43	--	---	--	--
Between rows (P.A. roles)	12.79	10	1.28	.086	2.98	N.S.
Between cols. (Resp. roles)	11464.62	3	2866.16	193.14	4.51	.01
Error	415.16	30	14.84	--	--	--

The answer to Question 2 then, is no, the group does not show significant difference in its response to general use of the various principal actor roles.

3. Do individual group members show significant differences in the way they respond to general use of the various principal actor roles?

This question represents an effort to separate out a factor which was compounded in the analysis of Question 2. That analysis showed that the group as a whole did not show significant difference in its response to the various principal actor roles; however, it is possible that individuals do respond differently to the various principal actor roles, but that these differences are masked when individual responses are pooled into group responses.

Again, double classification analysis of variance was used in the investigation of this question. The data consisted of the percentage of each individual's responses (responses converted to arc-sine values) falling into each of the four response categories, for each of the 11 principal actor roles used in this analysis. Four separate analyses were made, one for each of the response categories. In each matrix the rows represented the individual group members and the columns represented the various principal actor roles.

TABLE II: ANALYSES OF VARIANCE TO DETERMINE DIFFERENCES IN USE OF THE RESPONSE CATEGORIES AMONG INDIVIDUALS AND THE VARIOUS PRINCIPAL ACTOR ROLES

Response Role	Source of Variation	Sum of Squares	d.f.	Mean Square	F.	F.001	P
Passive Attendance	Total	5945.19	76	--	--	--	--
	Between rows (Individuals)	4166.62	6	694.37	90.53	3.12	.01
	Between Columns (P.A. Roles)	319.22	10	31.92	4.16	2.63	.01
	Error	460.35	60	7.07	--	--	--
Withdrawal	Total	3649.88	76	--	--	--	--
	Between rows (Individuals)	1144.90	6	190.82	7.6	3.12	.01
	Between Columns (P.A. Roles)	998.57	10	99.86	3.98	2.63	.01
	Error	1506.41	60	25.11	--	--	--
Approach	Total	3392.19	76	--	--	--	--
	Between rows (Individuals)	1299.79	6	216.63	8.31	3.12	.01
	Between Columns (P.A. Roles)	527.77	10	52.78	2.03	2.63	NS
	Error	1564.63	60	26.07	--	--	--
Attack	Total	3519.84	69	--	--	--	--
	Between rows (Individuals)	2191.82	6	365.30	21.49	3.12	.01
	Between Columns (P.A. Roles)	393.65	9	43.74	2.53	2.75	NS
	Error	934.37	54	17.30	--	--	--

An examination of these results suggests that with reference to use of four response categories there tends to be more variation among individuals than principal actor roles. With two of the response categories (i.e., approach and attack) the between rows (individual principal actors) variation exceeded the level of significance. It will be noticed also that with the other two response categories (passive attendance and withdrawal) while both row and column F values exceed the level of significance, the values for rows is much larger than that for columns.

Taken as a whole then, these results suggest that individual factors are more important in determining the extent to which the response categories are used, than is the principal actor role in response to which the response is made. With specific reference to Question 3, these results support the position that individual members of the group showed significant differences among each other in the way they responded to the various principal actor roles, but showed much less variation in the type of response to roles. In other words, clients showed idiosyncratic patterns of response which cut across all principal actor roles.

4. Does the group show significant differences in the way it responds to different individuals using the same principal actor roles?

This question was designed to allow the investigators to trace the relative influence of individual principal actors and principal actor roles in determining the type of response made by the group.

Double classification analysis of variance was used also in the investigation of this question. The data analyzed consisted of the percentage of group response (converted to arc-sine values) falling in each of the four response categories, made in response to each individual member's use of each of the various principal actor roles. Four separate analyses were made, one for each of the response categories. In each matrix, the rows represented individual principal actors and the columns represented the various principal actor roles. The results of the analyses are shown in Table 3.

An examination of these results yields no clear-cut pattern across all response categories. The analysis for Attack indicates that there was highly significant difference among the various principal actor roles in the extent to which they evoked this response role. No significant difference was noted in the extent to which different members of the group evoked this response from the group.

With Approach, opposite results are noted. Here significant difference exists in the extent to which the group responds with this response category to various group members, but difference among principal actor roles was nonsignificant.

The analyses for Passive Attendance and Withdrawal show significant differences both among the various members and the different principal actor roles with regard to the extent to which they evoke these two response categories.

TABLE III: ANALYSES OF VARIANCE TO DETERMINE DIFFERENCES IN GROUP USE OF THE RESPONSE CATEGORIES IN RESPONSE TO DIFFERENT PRINCIPAL ACTORS AND THE VARIOUS PRINCIPAL ACTOR ROLES

Response Role	Source of Variation	Sum of Squares	d.f.	Mean Squares	F	F.05	P
Passive Attendance	Total	2322.74	65	--	--	--	--
	Between rows (Individuals)	329.95	5	65.99	2.36	2.40	.05
	Between Columns (P.A. Roles)	594.26	10	59.26	2.12	2.02	.05
	Error	1398.53	50	27.97	--	--	--
Withdrawal	Total	2282.1	65	--	--	--	--
	Between rows (Individuals)	344.2	5	68.8	3.39	2.40	.05
	Between Columns (P.A. Roles)	1025.3	10	102.5	5.05	2.70	.001
	Error	1012.6	50	20.3	--	--	--
Approach	Total	1487.17	65	--	--	--	--
	Between rows (Individual)	385.20	5	77.04	4.65	2.40	.001
	Between Columns (P.A. Roles)	274.74	10	27.74	1.68	2.70	N.S.
	Error	827.23	50	16.55	--	--	--
Attack	Total	980.29	65	--	--	--	--
	Between rows (Individual)	105.99	5	21.20	2.00	2.40	N.S.
	Between Columns (P.A. Roles)	345.55	10	34.56	3.27	2.70	.001
	Error	528.75	50	10.58	--	--	--

One might speculate that if the response categories are formed into a continuum ranging from Approach on one extreme and Attack at the other in this manner:

Figure I

Response Continuum

(positive)____(negative)

Approach   Passive Attendance   Withdrawal   Attack

It is only with the extreme types of response that role and individual factors exert prepotent influence. In line with this type of speculation, it might be said that the group supports and shows positive response on the basis of individual characteristics of the principal actor, but attacks and shows hostility toward what is said by the various principal actors.

DISCUSSION OF RESULTS

The present investigators believe that the results of the preceding analyses have important implications for the study and management of group counseling. With reference to the study and investigation of counseling groups, the method for classifying group interaction employed in this study was found to be reliable, workable and capable of tracing the influence of such factors as individual differences and Principal Actor role differences which are at play in the group situation. In addition to the adequacy of the system of Principal Actor Roles and response categories, the mechanics of their use in the classification system is seen as serving as a model for future investigation of the group process who might be focusing on other aspects of group interaction. For example, Antenen (1) carried out a study in which he used a method of classifying the verbal statements of group members which identified and categorized the topic and accompanying affect of the statements. It would theoretically be possible to join this classification system to the response category classification system of the present system in order to trace the relative effects of the topic and/or affect of statements upon the type of responses evoked from the group.

Some of the results obtained seem to have implications for the management of counseling groups. For example, the analysis for Question 3 indicates that individual characteristics of the respondent, rather than Principal Actor Role factors, are most important in determining the type of response an individual will make to a given verbal statement. This would seem to place emphasis upon the importance of careful selection of group members as a means of influencing the general affect tone of group interactions. A fruitful line of inquiry might be an attempt to discover significant relationships between specific individual characteristics and the types of response made by individuals in the group counseling situation. Discovery of such relationships would make it possible to form counseling groups with more confidence as to the way in which individuals are apt to respond to group interaction than that afforded by the current set of general principles distilled out of the experience of individual counselors or therapists (3, 11). In line with this type of speculation is the finding (Question 4) that individual characteristics seem to be more important than principal actor role factors in the elicitation of Approach responses from the group. Further research might lead to the discovery of those individual characteristics which tend to draw positive response from individuals, thus making it possible to form groups in a way that will maximize support and positive responses among individuals.

This study, then, is seen as having presented a useful method for studying group interaction and having also presented some specific suggestions as to areas of investigation which should yield significant principles in accordance to which the characteristics of group interaction may be understood and/or controlled.

SUMMARY

This study described a method for the classification of group interaction. This method consisted of the classification of the verbal contributions of group members according to a system of 28 Principal Actor Roles, and the responses of group members to these verbal contributions according to a system of four response categories.

This classification method was used to examine the interaction of a counseling group of bright underachieving fifth graders. Analysis of the interaction yielded the following results:

1. The group, as a whole used the different response categories to varying degrees;
2. The group did not show significant difference in the way it responded to general use of the various principal actor roles;
3. Individual factors are more important in determining the extent to which the various response categories are used than are principal actor role factors;
4. Although no clear-cut pattern, across all response categories, was found to exist in the investigation of whether the group showed significant differences in the way it responded to different individuals using the same principal actor roles, it was found that:
    a. in the use of the response category Attack, there was highly significant difference among the various principal actor roles in the extent to which they evoked this response;

    b. with regard to Approach, there exists significant difference in the extent to which the group responds with this response category to the various group members.

BIBLIOGRAPHY

1. Antenen, Wayne W., "Changes in Topic and Affect During Group Counseling: Its Relationship to Outcomes of Group Counseling," Unpublished doctoral dissertation, University of Illinois, 1963.

2. Apostal, Robert, Ohlsen, Merle, and Proff, Fred, "Description and Analysis of Roles Played by Adolescents in Group Counseling," a mimeographed paper, College of Education, University of Illinois, 1959.

3. Bach, George R., *Intensive Group Psychotherapy*, New York, the Ronald Press, 1954, pp. 18-27.

4. Benne, K. D., and Sheats, R., "Functional Roles of Group Members, "*Journal of Social Issues*, 1948, 4: 42-47.

5. Buss, A. H., Gerjuoy, Irma R., and Zusman, J., "Verbal Conditioning and Extinction with Verbal and Nonverbal Reinforcers," *Journal of Experimental Psychology*, 1958, 56: 139-145.

6. Frank, J. D., "Therapy in a Group Setting." In M. Stein (Ed.) *Contemporary Psychotherapies*, New York, The Free Press of Glencoe, 1961.

7. Hartmen, C. H., "Verbal Behavior of Schizophrenic and Normal Subjects as a Function of Types of Social Reinforcement," Dissertation Abstract, 1955, 15: 1652-1653.

8. Horney, Karen, *Our Inner Conflicts*. W. W. Norton and Co., New York, 1945.

9. Kanfer, F. H., "Comments on Learning in Psychotherapy," *Psychological Reports*, 1961, 9, 681-699.

10. Ohlsen, Merle M., *Evaluation of Group Techniques in the Secondary Schools*, (A series of lectures given at a guidance workshop) Cornell University, 1963.

11. Powdermaker, F. and Frank J. D. *Group Psychotherapy*, Cambridge, Mass., Commonwealth Fund, Harvard University Press, 1953.

12. Saslow, G., and Matarazzo, J. D., "A Technique for Studying Changes in Interview Behavior," In E. A. Rubinstien and M. B. Parloff (Eds.) *Research in Psychotherapy*, Washington, American Psychological Association, 1959.

13. Snedecor, G. W., *Statistical Methods*, Ames,Iowa, Iowa State College Press, 1956.

Principal Actor Roles

Code		
A	1.	Aggressor: Exhibits hostile behavior toward others in the group or attacks the topic of discussion. Deflates the status of others. Expresses disapproval of values, acts, contributions of others. Also, causes laughter to be directed upon another. Disagrees with statement of another or offers a counter opinion.
Am	2.	Ameliorator: Attempts to make amends to an individual when own remark has led to group attacking the individual or when own remark has caused another individual to feel threatened.
B	3.	Blocker: Tries to avoid an issue being discussed. Attempts to maintain or bring back an issue after the group has rejected or bypassed it.
Cli	4.	Clarifier: Clarifies for the members of the group who are present the relationships among various feelings, ideas, topics, and suggestions.
Clo	5.	Clarifier: Clarifies with reference to persons outside of the group the relationships among various feelings, ideas, topics, and suggestions, e.g., important others such as absent members, members' children, or children's teachers. Refers to statements already mentioned.
Cld	6.	Clarifier: (a) Clid - Demands clarification with reference to persons, feelings, opinions, topics, suggestions, etc., within the group. "Do you mean, Bill, that you feel...?" (b) Clod - Demands clarification with reference to persons, feelings, opinions, topics, suggestions, etc., outside of the group. "Are you saying, Bill, that your teacher ...?"
Cx	7.	Catharter: Restricted to client-actor only. Getting release by talking about some hurtful experience. Implies the presence of affect.
D	8.	Dominator: Tries to assert authority or superiority by manipulating the group or certain members of the group. The dominator gives directions authoritatively or interrupts the contributions of others.
E	9.	Evaluator: Subjects the accomplishments of the group to some standard or set of standards of group functioning in the context of the group task. This comparison of action to some standard must be actual, i.e., "If we continue this, no one will be helped." If group is merely prodded, use Ex.

Code

Ep 10. Expositor Role: A group member relates to the group his acceptance and/or use of things learned from the counseling sessions, e.g., changed behavior toward an important other or a changed way of thinking about what should be done in handling this person.

Ex 11. Expeditor: Encourages and facilitates the participating of others. "Bill, what do you think about this?" Prods the group to action or decisions; attempts to stimulate or arouse the group to greater or "higher quality" activity. May take the form of starting the group action by being first to initiate action.

G 12. Giver of Information or Advice: Offers facts, generalization, or opinions which are "authoritative" or relate his own experience or opinion pertinently to the group problem. Gives information or opinion in direct response to a question or explains more about the actual situation being discussed. (Differs from Cl in that more information is being given rather than a more detailed explanation of information already given.)

Ga 13. Giver of Advice: Gives advice as to how to handle a particular situation or what to do under certain conditions.

Hs 14. Help Seeker: Talks about a problem with affect and feeling. He also may ask for assistance or advice.

I 15. Initiator: Suggests or proposes to the group or individuals in the group new ideas or a changed way of regarding the group problems or goal or individual problem. The initiation may take the form of a proposed new procedure for the group or a new way of organizing the group for the task ahead. Re-organizes thinking. Changes current action (such as closing a session).

In 16. Intellectualizer: Analysis of a problem in purely intellectual terms to the neglect or exclusion of affective or practical considerations. It is often a defensive reaction to avoid affect. A person will endeavor to name and define instead of avowing feeling (English & English).

Io 17. Interprets behavior of important others (in client's lives) not present in the group.

Ii 18. Interpreter: Interprets feelings expressed by members of the group or self, or interprets the significance of nonverbal behavior or explains why members feel and behave as they do. Counselor, especially, will say, "I have a feeling that Bill feels...."

Is 19. Information Seeker: Asks for authoritative information and for facts pertinent to the problem being discussed. If the question can be answered with a fact, classify the behavior as information seeking, but if the answer requires an opinion, classify the behavior as opinion seeking.

Os 20. Opinion Seeker: Asks not primarily for the facts of the case but for a clarification of the values pertinent to what the group is undertaking, or of values involved in a suggestion made or in alternative suggestions. Usually this is exhibited by asking of another what he thinks.

Pb 21. Prober: Forces or puts pressure on an individual to provide more personal information about himself or his family or about his contribution than the individual has already provided. Insistancy of demand goes beyond the mere request for clarification.

R 22. Reflector: Reflects feelings expressed by members of the group. This reflection is usually limited to specific feelings which have been expressed by the person to whom the statement was directed. Occasionally the counselor or one of the clients may reflect a "group feeling." When persons respond to mere content, role should be classified as Information Seeker or Giver.

Rp 23. Role Player: Takes onto himself the thoughts, actions, and feelings of another person as part of role playing procedures. May also take his own role when role playing.

Rs 24. Recognition Seeker: Calls attention to himself by boasting, monopolizing the conversation, or other forms of exhibitionistic behavior. Struggles to avoid being placed in an inferior position.

S 25. Supporter: Agrees with and accepts the contribution of others. Indicates understanding and acceptance of other points of view, ideas, and suggestions.

Ss 26. Support Seeker: Makes a bid for group or some members of the group to accept own beliefs, opinions, ideas, or decisions.

St 27. Structurer: Defines the purposes of the group, establishes goals, and describes the counseling process. Sets the stage for role playing discussions. May summarize the discussion in a specific direction. Redefines counselor's role, either directly or by implication.

Sy 28. Sympathy Seeker: Tries to evoke sympathy from others through expressions of insecurity, personal confusion, depreciation of self.

NOTE: These categories cannot be automatically assigned to the principal actor apart from the context. The context surrounding any action is important to the classification of that action.

Response Categories

t - approach behavior is exhibited by moving toward the principal actor. It is exhibited by such behavior as arm extended with hand open, smiling, pleasant facial expression, and making a subsequent remark to the principal actor which is positive in nature, e.g., agrees with him, expresses desire to understand or to empathize with him, or helps the principal actor continue his discussion. A reaction to the principal actor also may be classified as approach when there is a general positive reaction toward other members. (To be classified as t, there must be without question, a warm, encouraging, friendly body, posture, and voice reaction.

a - attack behavior is exhibited by moving against the principal actor. This negative behavior includes such behavior as an arm extended with the hand either partially closed or clenched, laughing at the principal actor, an angry look toward him, a slouched position, an abrupt change in topic of conversation, belittling the topic under discussion, failure to respond when addressed by the principal actor and responding to him in a belligerent or sarcastic tone.

w - withdrawal behavior--moving away from the principal actor is classified as withdrawal behavior. It includes such behavior as eyes closed, looking away from the principal actor (in most, but not in all cases--see passive attendance), an inspection of some part of the body or clothing, and moving the body in such manner as to be backing off from the group. Indifference or apathy, when seen, is to be classified as withdrawal behavior. (Make this category a "clear," unquestioned withdrawal action.)

p - passive attendance behavior--this behavior is exhibited when a group member is clearly following the principal actor's contribution. Clearly following means that the group member has his eyes directed upon the principal actor but is not exhibiting approach or attack behavior.

Occasionally the reaction to a principal actor may be classified as passive attendance when there is no evidence of direct eye contact, e.g., the member's subsequent behavior indicates that he was following the discussion though not deeply involved. (To be classified, the reactor must not exhibit participation.)

Counselor may be classified as passive when he is in a contemplative posture (not giving eye contact).

Principal Actor Rating Sheet

Group Session # Counselor

Rater

#	PA	Roles	Time
1			
2			
3			
4			
5			

#	PA	Roles	Time
6			
7			
8			
9			
10			

Response Category Rating Sheet

Group Session # Counselor

#	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								

#	A	B	C	D	E	F	G	H
6								
7								
8								
9								
10								

CHANGE IN TOPIC AND AFFECT DURING GROUP COUNSELING: ITS RELATIONSHIP TO OUTCOMES OF GROUP COUNSELING

Wayne W. Antenen and Merle M. Ohlsen
University of Florida University of Illinois

The preparation of personnel to provide counseling services in educational settings has included, in recent years, both dicactic and practicum training in group counseling. With this increased interest in group counseling, there has come increased research in the area; however, few investigations have focused upon content variables in group counseling. An investigation of the content of verbal interactions in group counseling and their relationship to global assessments of outcomes of group counseling should provide insights and increased understanding of the counseling process and in turn yield implications for practice and for the preparation of counselors.

In view of the limited number of research studies in group counseling which utilized a content analysis technique, the following review of the literature includes studies from both individual and group counseling and psychotherapy deemed relevant to the present investigation.

Talland (19) expressed disagreement with those who totally ignore or minimize the importance of content in counseling and psychotherapy. To support his position, Talland and Clark (20) had groups of hospitalized neurotic patients rate the topics which were most helpful and most disturbing during group sessions. For such hospitalized groups they found that the topics which were rated most disturbing were also rated as most helpful.

Snyder (17), Raimy (12), Seemen (13) and Todd and Ewing (21) have reported a positive relationship between the movement toward increased positive feelings toward self as counseling progresses and outcomes of individual counseling. The evidence suggesting an accompanying decrease of negative feelings toward self, again primarily from research in individual counseling, is not as conclusive. Earlier studies in individual counseling conducted by Raimy (12) and Snyder (17) suggest that a decrease in negative feelings toward self as counseling progresses is associated with positive outcomes. From the results of a more recent study Todd and Ewing (21) concluded that positive and negative feelings toward self do not represent the extremes of a single continuum but rather represent two separate variables which may require independent investigation.

Previous content analysis studies in group counseling (9, 11, 24) have not been able to demonstrate the change in feelings toward self as conclusively as this has been demonstrated in content analysis studies in individual counseling. Peres (11) reported that "benefited" group clients expressed an increased number of both positive and negative attitudes toward themselves as counseling progressed. Wigell and Ohlsen (24) reported that intellectually superior, underachieving adolescents in group counseling tended to begin talking about themselves with positive affect in early sessions and with increased negative and ambivalent affect during later sessions.

From research in individual counseling, Snyder (16) and Raimy (12) reported a positive relationship between movement toward increased positive feelings toward other persons and outcomes of counseling. This evidence is not as conclusive as that related to change in feelings toward self. Stock (18) suggested that there may be differential change when one considers feelings toward certain categories of other; e.g., family members, social acquaintances, "general" others. Sheerer (14) and Stock (18) have demonstrated a positive relationship between change in feelings directed toward self and change in feelings directed toward other persons during individual counseling.

Hypotheses

Although "content analysis" traditionally refers to the topics of conversation, this study defines "content" as including two distinctly separate and classifiable entities: 1) topics or problem areas discussed and 2) affect or feeling tone directed toward topics and problem areas discussed. The primary goals of the present study were to utilize the content analysis system to investigate: 1) the relationship between changes in certain topic-affect associations and global assessments of outcomes of group counseling, 2) differences in the content of verbal interactions of clients who were assessed as "least successful" and those assessed as "most successful" in the terms of the outcomes of group counseling, and 3) the relationship between change in affect directed toward topics representing "self" and topics representing "others."

The following hypotheses were tested to achieve the goals of the present study.

Hypothesis 1. As counseling progresses changes in certain affect-topic associations will have positive relationships with rankings of outcomes of group counseling:

a. Increased ratio of positive to negative affect directed toward self.

b. Increased ratio of positive to negative affect directed toward topic others.

c. Increased ratio of positive to negative affect directed toward topics representing primary personal others (members of immediate family.)

d. Increased ratio of positive to negative affect directed toward topics classified as authority figures.

e. Increased ratio of positive to negative affect across all topics.

Hypothesis 2. Group members assessed as most successful in terms of the outcomes of group counseling will differ from group members assessed as least successful with respect to the following variables obtained from the content analysis of their verbal interactions:

a. Greater percentage of use of topic self by most successful members than by least successful members.

b. Greater percentage of use of topics representing primary personnel than by least successful members.

c. Greater percentage of use of topic group by most successful members than by least successful members.

d. Less percentage of use of topic things by most successful members than by least successful members.

e. Greater percentage of use of the affect categories by most successful members than by least successful members.

Hypothesis 3. Across counseling sessions a relationship exists between affect directed toward self and affect directed toward other persons:

a. For the group members assessed as most successful in terms of outcomes of group counseling, a positive correlation exists between affect directed toward self and affect directed toward other persons.

b. For the group members assessed as least successful in terms of outcomes of group counseling, a positive correlation does not exist between affect directed toward self and affect directed toward other persons.

Procedure

The Sample

Forty-seven subjects participating in six counseling groups conducted in an educational setting comprised the sample. The six groups included two groups of intellectually superior, underachieving adolescents, two groups of prospective counselors, and two groups of parents of underachieving fifth grade pupils. The six groups were coded according to the following system and will hereafter be referred to by the appropriate code letters.

TABLE 1. CODING SYSTEM OF SIX COUNSELING GROUPS

Group	Code	Size N	Sessions N
Adolescent A	AA	8	16
Adolescent B	AB	7	16
Counselor A	CA	9	14
Counselor B	CB	8	14
Parent A	PA	9	16
Parent B	PB	6	21

Group AA included eight ninth graders, two girls and six boys. Group AB included seven members, two girls and five boys. Each of these groups met for two forty-minute sessions each week for a period of eight weeks. Tape recordings and video recordings were made of the sixteen sessions of each of the two groups. Groups AA and AB have been included and described in previous research investigations in group counseling (3).

Groups CA and CB were comprised of graudate students enrolled in the counselor preparation program at the University of Illinois. Participation in group counseling was voluntary. Group CA included nine members, four females and five males. Group CB included eight members, five females and three males. Both groups met for two fifty-minute sessions each week for a period of seven weeks. Tape recordings were made of all sessions. Because of the poor recording quality of four of the sessions from group CB only ten of the fourteen sessions were used in the present study. Gazda and Ohlsen (5) have reported the results of the pre- to post counseling and follow-up changes on the assessment measures utilized to evaluate the group counseling experience.

The two parent groups were included in a larger project (8) which had as its purpose the investigation of the effect of group counseling with bright, unachieving fifth grade pupils and their parents. Group PA was comprised of nine parents, both parents of four of the fifth grade children and just the mother of one of the fifth graders. Group PB included six parents, mothers and fathers of three of the fifth grade children. Group PA met for two one-hour sessions a week for a period of eight weeks. Group PB met for two one-hour sessions a week for a period of ten and one-half weeks. Tape and video recordings were made of the parent counseling sessions.

Treatment process

Three counselors were involved in the treatment process. From a subjective comparison of the counselors' techniques and interactions during the counseling sessions and in view of the fact that two of the counselors were previously trained by and supervised by the third counselor during the treatment process, the degree of similarity in orientation is considered to be high. Therefore, it was considered appropriate to combine data from the different groups where this was warranted by the nature of the hypothesis being tested. This process was defined earlier by Ohlsen and Proff (10).

Data Collection

Content Data: The raw data for the present study consisted of the verbalization of each group member in each counseling session for which either tape or video recordings were available.

Typewritten transcripts were made of each session from the tape recordings. The transcribed protocols were typed in action units, a technique previously used in content analysis studies (9,24) to identify the unit to be classified. The action unit was defined as: the smallest complete unit of thought having within it a subject (expressed or implied) and a verb or predicate. Wigell (23) has developed a list of guides which were used in this study to identify and and isolate the action units for classification.

A revision of the Wigell and Ohlsen (24) system of content analysis was developed and utilized in the present study. The content analysis system included two dimensions of classification: 1) topics or problem areas discussed, and 2) the affect or feeling tone associated with the topics or problem areas discussed. A description of the topic classification categories and the coding system utilized in the actual classification is presented in Table 2.

The affect classification categories used in the present study were based upon those used extensively in the studies cited in the literature. Table 3 presents a description of the affect classification categories and the coding system utilized in the actual classification.

Prior to the utilization of the content analysis system in the present study, four judges independently classified 537 action units transcribed from a group counseling session. The judges completed their classifications while viewing and listening to the group session on a kinescopic recording. Percentages of agreement between all possible combinations of the four judges were computed to obtain a measure of reliability of the classification procedures. The following ranges of per cent of agreement were obtained: topic - 76.2 to 88.5% and affect - 74.3 to 90.09%. In view of the obtained percentages of agreement the classification categories were considered to be sufficiently reliable to warrant acceptance for the present study.

The classification for the present research was completed by three graduate students in counseling and guidance who had participated in the reliability study. Topic and affect were classified simultaneously while the classifier read from the transcribed protocol, listened to and viewed the kinescopically recorded sessions of groups AA, AB, PA, and PB. In the case of groups CA and CB, where kinescopic recordings were not available, the classification was completed from the tape recorded sessions. The obvious limitation in the latter is the lack of visual cues in the classification of affect. A recent study by Ohlsen and Lerner (7) investigated the discrepancies between affect classification from tape recordings and video recordings. Utilizing two groups of adolescent clients, they reported percentages of agreement of 83% and 82% in the classification of affect from tape and video recordings. The results of the Ohlsen and Lerner study support the decision to include groups CA and CB in the present investigation even though video recordings were not available for the content analysis.

Following the classification procedure, the frequency of each topic and affect classification was tallied by sessions for each group member.

Outcome data: Following the termination of counseling for groups AA, AB, CA, and CB, all persons having any contact with the counseling or the data from assessment measures met as groups and considered the extent of each individual's progress during group counseling. These groups consisted of the therapist who had worked with the counseling groups, the persons who had listened to the recordings for previous research studies, those who had observed the counseling regularly and those who had worked with the pre- and post projective and self report data. After discussing each client and noting the specific ways in which each had changed during counseling, the clients were ranked within groups on a continuum of "most positive change" to "least positive change." To facilitate the rankings, each client was rated on a six point scale.

A similar technique for assessing outcomes was utilized following termination of groups PA and PB. The group therapist and two second year doctoral students in counseling and guidance who were classifying the video recordings of groups PA and PB in a research study on interaction process,

TABLE 2: THE TOPIC CLASSIFICATION CATEGORIES AND DESCRIPTION OF TOPIC CATEGORIES

Category	Code Symbols	Description
Self	Sa	The speaker is talking about his physical, mental, or emotional self.
	Sb	The speaker is talking about himself doing something or manipulating some object(s), (*e.g.*, studying, reading, camping, working, watching t.v., etc.)
Group	Ga	The speaker is talking about the members of the counseling group as persons.
	Gas	The speaker is talking about his or her spouse who is a group member. When classifying this category a classification of authority figure or non-authority figure is assigned on the basis of the criteria explained in A and B below (**.)
	Gb	The speaker is talking about the group counselor.
Others** Outside the Group		The speaker is talking about:
	Os	spouse, not a member of the counseling group.
	Oc	child or children.
	Ocg	children in general.
	Op	parents, not differentiating between father and mother.
	Opg.	parents in general.
	Ofa.	father.
	Om.	mother.
	Osib.	brothers and/or sisters.
	Og.	guardians.
	Or.	relations.
	Of.	close friends outside the group: for children this would include both peers and adults perceived as friends.
	Oe.	employers and/or supervisors.
	Ot.	teachers.
	Oa.	school administrators.
	Oo.	other named acquaintances and "general others" who are not included in the above categories. This may include other adults, co-workers, *etc*.
Things and Ideas	N	The speaker is talking about things, places, ideas, time, *etc*.
	X	Unclear recording makes classification impossible.

**Each of the "others" is classified as A or B.

A - an authority figure. One is classified as an authority figure only when the speaker talks about the "other" as a person exercising authority over him.

B - a non-authority figure.

TABLE 3: THE AFFECT CLASSIFICATION CATEGORIES AND DESCRIPTION OF AFFECT CATEGORIES

Category	Code Symbols	Description
Positive	P	acceptance, affection, agreement, approval, comfort, compliance, concurrence, encouragement, enjoyment, favorable attitude, freedom from worry, freedom from anxiety, gives help, happiness, liking, love, pleasure, raises other's status, relief, rewards, satisfaction, shows solidarity, understands, warmth, supports others, etc. (e.g., "I'm interested in science." "She's a good teacher." "You did a good job in that class.")
Negative Affect	N	anger, anxiety, critical, deflates other's status, derogation, discomfort, dissatisfaction, fear, hate, non-acceptance, shows antagonism, shows passive rejection, shows tension, unfavorable attitude, withdraws from the field, withholds help, worries, etc. (e.g., "You're all mixed up." "He needles everybody." "I don't trust people.")
Ambivalent Affect	A	Concurrent presence of negative and positive feeling, a clear conflict between positive and negative attitudes. (e.g., "You can take it or leave it." "You say yes and no." "I can't decide between them."
No Discernable Affect	O	Lacks affect value, no affect value is identifiable. A mere factual objective statement. (e.g., "I'm thirteen." "What time is it?" "Are you guys taking biology?")
	x	Unclear recording makes classification impossible.

made with-in group rankings of clients on the continuum of "most positive change" to "least positive change." Pre- and post projective data and information from self report instruments were also available to aid in the rankings.

For groups AA and AB the projective test data were obtained from the subjects' responses to five pictures. The set of five pictures was comprised of Card 2 of the Thematic Apperception Test, Card 1 of the Michigan Picture Test and Cards 1, 4, and 5 of the Alexander and Cronbach Adaption of the TAT. For groups CA, CB, PA, and PB a set of five pictures comprised of Cards 2 and 13MF of the TAT, Card 1 of the Michigan Picture Test and Cards 4 and 5 of the Alexander and Cronbach Adaptation of the TAT provided the projective test data. The self report data for all groups were obtained from a seventy-three item Behavior Inventory. The construction and validation of this inventory is described in detail in a previous investigation (2) of group counseling which was conducted at the University of Illinois. It should be noted that the projective data and self report data were used as supplements to the judgments of therapists and clinical observers in determining the within-group rankings of outcomes.

The method of within-group rankings compared each client with the other members of his particular counseling group. Rather than a specific criterion for assessment of outcomes, the assessment method represented a global measure of outcomes derived from the clinical judgments of therapists and clinical observers and from data obtained on projective and self report instruments. This method of assessing outcomes did allow for the recognition of change of different modes across individuals without placing a narrow restrictive definition upon change. However, inherent in this approach is a lack of clarity in the criterion of change or progress which places limitations on the extent to which the results of this study can be generalized. It is important to recognize that in practice, in both group and individual counseling, the counselor's evaluation of a client's progress at any given time is typically and principally based upon the counselor's observations and clinical appraisal.

Statistical Analysis

Hypotheses 1a through 1e were tested by computing the positive-negative affect ratios associated with the topics stated in the hypotheses for the first third, middle third, and last third of each individual's total number of action units during group counseling. On each of the topic categories stated in hypotheses 1a through 1e the group members were ranked within counseling groups in terms of the increase in positive - negative affect ratio from the first third to the last third of action units and in increase from middle third to last third of action units. The within-group rankings obtained in the above method from the content analysis procedure were correlated with the within-group rankings of outcomes to investigate the relationship between change in affect associated with specific topics and outcomes of group counseling. The rank order correlation technique was used to investigate these relationships.

Hypotheses 2a through 2e were evaluated by testing differences between two criterion groups. The two members from each group with outcome rankings of 1 and 2 and the two members with the lowest outcome rankings from each group were placed in two criterion groups. For purposes of this study, the twelve members with the highest within-group rankings formed the "most successful" criterion group and the twelve members with the lowest within-group rankings formed the "least successful" criterion group.

Frequencies of occurrence of each of the content variables stated in hypotheses 2a through 2e were summed by individuals across all counseling sessions. The resulting sums of content variables for each of the twenty-four individuals were converted to percentages of frequency for any given classification variable by dividing the obtained sum by the total number of interactions (action units) across all sessions. The percentage rates for each of the variables stated in hypotheses 2a through 2e were converted to arcsin values (4, 15), a nonlinear transformation yielding an approximately normal distribution amenable to parametric statistical treatment. The means and variances in arcsin values were computed for each of the two criterion groups on the variables stated in hypotheses 2a through 2e. The appropriate one-tailed t test was employed to determine whether chance could account for the differences between means of the two criterion groups.

Hypotheses 3a and 3b investigated the relationship between change in affect directed toward topic "self" and change in affect directed toward "others" in the two criterion groups. Topic categories Sa and Sb (See Table 2, p.) were combined for the "self" variable and the fifteen topic categories of "others" in addition to the three topic categories of "group" were combined to represent the "others" variable in this analysis. A weighting system was developed to determine the affect rating for each variable ("self" and "others") by sessions for each individual in the criterion groups. The affect rating for each of the two variables was obtained by multiplying each frequency of "positive" affect by 3, each frequency of "no discernable affect" by 2, and each frequency of "negative" affect by 1; the sum of which was divided by the frequencies of classification

$$\left(\frac{3(\Sigma\,\mathrm{Pos}) + 2(\Sigma\,\mathrm{NoAf}) + (\Sigma\,\mathrm{Neg})}{(\Sigma\,\mathrm{Pos}) + (\Sigma\,\mathrm{NoAf}) + (\Sigma\,\mathrm{Neg})}\right)$$

This yielded a weighted affect rating, 1) toward "self" and 2) toward "others," which ranged in values of 1.00 (negative effect) through 3.00 (positive affect.) The affect rating was computed for both variables, "self" and "others," by sessions for each individual in the two criterion groups. The Pearson Product Moment correlation technique was computed to assess the relationship between the two variables across sessions for individuals.

In all cases statistical procedures were applied to directional hypotheses, therefore, one-tailed tests of significance of the obtained statistics were used. The .05 level of significance was believed to be sufficiently stringent for an exploratory study based on a small sample.

Results

Hypothesis 1

As counseling progresses, changes in certain affect topic associations have positive relationships with rankings of outcomes of group counseling.

1a. The Relationship between Increase in P/N Affect Ratio Associated with Topic Self and Outcomes of Group Counseling

Topic categories Sa and Sb (See Table 2, p.) were combined for this analysis.

The rank order correlation coefficients reported in Table 4 are not of sufficient magnitude to warrant the acceptance of the predicted positive relationship between increase in P/N affect ratio associated with topic self and outcomes of group counseling. The above was true without exception across all six groups and over both occasions where change was assessed.

TABLE 4: RANK ORDER CORRELATIONS BETWEEN INCREASE IN P/N AFFECT RATIO ASSOCIATED WITH TOPIC "SELF" AND OUTCOMES

		Occasions			
Group	N	First One-third to Last One-third		Middle One-third to Last One-third	
		r'	Probability	r'	Probability
AA	8	.000	NS	.000	NS
AB	7	-.143	NS	-.107	NS
CA	9	.033	NS	.000	NS
CB	8	-.720	NS	-.119	NS
PA	9	.519	NS	.100	NS
PB	6	.479	NS	.479	NS

Thirty-three of the forty-seven individuals comprising the sample exhibited an increased ratio of positive to negative talk about self when the first third of their interactions were compared with the last third of their interactions. Fourteen of the individuals had a lower ratio of positive to negative self talk in the last one-third of their interactions. The above would indicate that changes in P/N affect ratio toward self did occur. However, it must be concluded without reservation that across groups there was no consistent relationship between the increase in ratio of positive to negative affect directed toward "self" and the outcomes of group counseling as defined in this study. The largest correlation obtained was in the opposite direction from that predicted. (Group, CB, r' = -.720)

1b. The Relationship between Increase in P/N Affect Ratio Associated with Topic "Others" and Outcomes of Group Counseling

The fifteen topic categories of "others" and the three topic categories of "group" (See Table 2, p.) were combined for this analysis.

Without exception the obtained correlation coefficients (Table 5) were not of sufficient magnitude to support the predicted positive relationship between increase in P/N affect ratio associated with topics "others" and outcomes of group counseling. There is no apparent positive relationship between increase in positive-negative affect ratio associated with the total topics "others" and outcomes of group counseling within the limitations of this study.

TABLE 5: RANK ORDER OCRRELATIONS BETWEEN INCREASE IN P/N
AFFECT RATIO ASSOCIATED WITH TOPICS "OTHERS" AND OUTCOMES

		Occasions			
Group	N	First one-third to Last One-third		Middle One-third to Last One-third	
		r'	Probability	r'	Probability
AA	8	.167	NS	.143	NS
AB	7	.643	NS	.464	NS
CA	9	-.250	NS	-.133	NS
CB	8	-.429	NS	-.119	NS
PA	9	.000	NS	-.200	NS
PB	6	-.900	NS	-.771	NS

In view of the range of correlation coefficients obtained (Table 5) across both occasions and the six groups, there was no consistent relationship apparent. The correlations for group PB on both occasions were the highest (r' = -.900 and r' = -.771) obtained and these were in the opposite direction from that hypothesized. The magnitude of the above negative correlations suggest that for group PB greater increase in positive-negative affect ratio directed toward "others" across occasions was associated with lower rankings on outcomes. Inspection of the affect ratio changes associated with topics "others" indicated that twenty-eight of the forty-seven individuals in the sample exhibited increases from first one-third to last one-third of interactions.

1c. The Relationship between Increase in P/N Affect Ratio Associated with Topics Representing "Primary Personal Others" and Outcomes of Group Counseling

"Primary personal others" in this study referred to the members of an individual's immediate family. Topic categories Gas, Os, Oc, Op, Ofa, Om, and Osib (See Table 2, p.) were combined in this analysis. After the above categories were combined for each individual it was found that the frequencies of classification of these categories across four of the groups were not sufficiently large to justify any statistical application. Therefore, the statistical analysis of "primary personal others" was carried out on only groups PA and PB.

The hypothesis predicted a significant positive relationship between increase in P/N affect ratio associated with topics representing "primary personal others" and outcomes of counseling. The correlations reported in Table 6 provide no support for the stated hypothesis. The fact that this analysis was able to be completed only on two groups provides limited results relative to this hypothesis. However, on the basis of these results it must be concluded that there was no significant positive relationship between the increase in P/N affect ratio associated with topics representing "primary personal others" and outcomes of group counseling.

The fact that the two parent groups (PA and PB) did devote many of their interactions to "primary personal others," while the other groups did not, resulted from parents talking a great deal about their children and also about their spouses who in the majority of cases were also group members.

TABLE 6: RANK ORDER CORRELATIONS BETWEEN INCREASE IN P/N AFFECT RATIO ASSOCIATED WITH TOPICS REPRESENTING PRIMARY PERSONAL OTHERS AND OUTCOMES

Group	N	Occasions			
		First One-third to Last One-third		Middle One-third to Last One-third	
		r'	Probability	r'	Probability
PA	9	-.217	NS	.217	NS
PB	6	-.042	NS	.073	NS

1d. The Relationship between Increase in P/N Affect Ratio Associated with Topics Representing Authority Figures and Outcomes of Group Counseling

An explanation of the "authority figure" category is found in Table 2, p. [illegible]. As a result of the low frequency of this classification category in groups CA, CB, PA, and PB, statistical analysis was not applied to these groups. The analysis was completed on groups AA and AB, groups of under-achieving but intellectually superior ninth graders.

The stated hypothesis predicted a significant positive relationship between increase in P/N affect ratio associated with "authority figures" and outcomes of group counseling. Although all correlations between the two variables (Table 7) were in the predicted direction, they were not of sufficient magnitude to reject the null hypothesis. It was concluded from these results, that within the limitations of this study, there was no significant positive relationship between increase in P/N affect ratio associated with "authority figures" and outcomes of group counseling.

As previously indicated, when compared with adult groups, more of the interactions in the adolescent groups focused upon authority figures involving parents, teachers, school administrators, and other adults perceived by the adolescents as authority figures. Nine of the fifteen adolescents had a greater P/N affect ratio associated with "authority figures" in the last one-third of their interactions when compared with the first one-third of their interactions.

1e. The Relationship between Increase in P/N Affect Ratio Across All Topics and Outcomes of Group Counseling

This analysis involved just the positive-negative affect ratio without regard to specific topics.

The stated hypothesis predicted a significant positive relationship between increase in P/N affect ratio across all topics and outcomes of group counseling. Without exception, across all groups and for both occasions, the correlation coefficients (Table 8) provide no evidence of a significant relationship in the predicted direction. The results substantially indicate the lack of positive relationship between increase in P/N affect ratio and outcomes of group counseling within the limitations of the study.

TABLE 7: RANK ORDER CORRELATIONS BETWEEN INCREASE IN P/N AFFECT RATIO ASSOCIATED WITH TOPICS REPRESENTING "AUTHORITY FIGURES" AND OUTCOMES

Group	N	Occasions First One-third to Last One-third r'	 Probability	 Middle One-third to Last One-third r'	 Probability
AA	8	.572	NS	.238	NS
AB	7	.321	NS	.143	NS

Inspection of the correlations reveals the frequency and magnitude of negative relationships. This strongly suggests, contrary to the stated hypothesis, that greater increase in P/N affect ratio is associated with lower rankings of outcomes.

TABLE 8: RANK ORDER CORRELATIONS BETWEEN INCREASE IN P/N AFFECT RATIO ACROSS ALL TOPICS AND OUTCOMES

Group	N	Occasions First One-third to Last One-third r'	 Probability	 Middle One-third to Last One-third r'	 Probability
AA	8	-.119	NS	-.262	NS
AB	7	-.143	NS	-.179	NS
CA	9	-.250	NS	-.317	NS
CB	8	-1.000	NS	.029	NS
PA	9	.067	NS	-.067	NS
PB	6	-.429	NS	-.524	NS

Hypothesis 2

Group members assessed as "most successful" in terms of the outcomes of group counseling will differ from group members assessed as "least successful" with respect to the following variables obtained from the content analysis of their verbal interactions.

2a. Comparison of the Percentage of Use of Topic "Self" in the Two Criterion Groups

Topics Sa and Sb (See Table 2, p) were combined for this analysis The stated hypothesis predicted a greater percentage of use of topic "self" in the "most successful' criterion group than in the "least successful" criterion group. Contrary to the stated hypothesis, the obtained mean of the "least successful" group was greater than the mean obtained in the "most successful" group (Table 9). The hypothesis as stated was rejected.

2b. Comparison of the Percentage of Use of Topics Representing "Primary Personal Others" in the Two Criterion Groups

"Primary personal others" in this study referred to the members of an

TABLE 9: DIFFERENCES BETWEEN MEANS OF THE TWO CRITERION GROUPS ON CONTENT VARIABLES

Content Variable	Criterion Group Most Successful N = 12 $\overline{X}$	 Least Successful N = 12 $\overline{X}$	t	Probability
Self	36.50*	37.43	-.204	NS
Primary Personal Others	23.08	14.75	1.413	NS
Group	25.17	22.34	.952	NS
Things	20.32	22.18	-.788	NS
Affect	62.18	56.45	1.540	NS

d.f. = 22 (N_1 - N_2 -2)
t = 1.72 required at .05 level.
*Means are presented in arcsin values.

individual's immediate family. Topic categories Gas, Os, Oc, Op, Ofa, Om. and Osib (See Table 2, p.   ) were combined in this analysis.

It was predicted in the hypothesis that there would be a greater percentage of use of topics representing "primary personal others" in the "most successful" group than in the "least successful" group. Reference to Table 9 indicates that the difference between means for this variable was in the predicted direction, however, the t value of the difference was not of sufficient magnitude to warrant the rejection of the null hypothesis.

2c. Comparison of the Percentageof Use of Topic "Group" in the Two Criterion Groups

Topics Ga, Gas, and Gb, (See Table 2, p.   ) were combined for this analysis

The stated hypothesis predicted a greater percentage of use of topic "group" in the "most successful" group than in the "least successful" group. Although the difference between means was in the predicted direction, the t value indicated that the probability of the obtained difference occurring by chance was greater than .05. The above is presented in Table 9.

2d. Comparison of the Percentage of Use of Topic "Things" in the Two Criterion Groups

The stated hypothesis predicted less percentage of use of topic "things" in the "most successful" group when compared with the "least successful" group. Although the difference between means was in the predicted direction (Table 9) it was not of sufficient magnitude to warrant acceptance of the stated hypothesis.

2e. Comparison of the Percentage of Use of the Affect Categories in the Two Criterion Groups

Affect categories P, N, and A were combined for this analysis. (see Table 2, p.   ).

It was predicted in the hypothesis that there would be a greater percentage of use of the affect categories in the "most successful" group than in the "least successful" group. Again the difference between means (Table 9) was in the predicted direction; however, the t value of this difference was not sufficiently great to reject the null hypothesis of no difference between means.

3a. The Relationship between Change in Affect Directed toward "Self" and Change in Affect Directed toward "Others" among Members of the "Most Successful" Group

It was hypothesized that across sessions there would be a positive relationship between change in affect directed toward "self" and change in affect directed toward "others" for members of the "most successful" criterion group. The results of this analysis, presented in Table 10, provide limited evidence to support this hypothesis. Two of the twelve members of the "most successful" criterion group did exhibit a significant positive relationship between change in affect directed toward "self" and change in affect directed toward others. However, when the above results are compared with the results of 3b, below, it cannot be concluded that the two obtained positive correlations were determined by the criterion group placement.

TABLE 10: THE RELATIONSHIP BETWEEN CHANGE IN AFFECT DIRECTED TOWARD "SELF" AND CHANGE IN AFFECT DIRECTED TOWARD "OTHERS" AMONG MEMBERS OF THE "MOST SUCCESSFUL" CRITERION GROUP

Member*	r	Probability
PA-8	.822	<.005
AA-7	.623	<.025
PB-5	.460	NS
PA-9	.386	NS
CA-6	.141	NS
CA-3	.110	NS
AB-6	.041	NS
AB-3	-.030	NS
CB-F	-.089	NS
CB-A	-.090	NS
AA-4	-.252	NS
PB-4	-.383	NS

*coding system for counseling group and member.

3b. The Relationship between Change in Affect Directed toward "Self" and Change in Affect Directed toward "Others" among Members of the "Least Successful" Criterion Group

Because of infrequency of interaction, this analysis was not completed on three members of the "least successful" criterion group.

It was hypothesized that across sessions a positive relationship between change in affect directed toward "self and change in affect directed toward "others" does not exist among members of the "least successful" criterion group. The hypothesis, as stated, was not supported by the results.

Two of the nine members of the "least successful" criterion group used in this analysis exhibited a significant positive relationship between change in affect directed toward "self" and change in affect directed toward "others." In addition, a cursory examination of the two ranges of correlations presented in Tables 10 and 11 would not lead to the conclusion that the relationship

Hypothesis 3

Across counseling sessions a relationship exists between affect directed toward self and affect directed toward other persons.

TABLE 11: THE RELATIONSHIP BETWEEN CHANGE IN AFFECT DIRECTED TOWARD "SELF" AND CHANGE IN AFFECT DIRECTED TOWARD "OTHERS" AMONG MEMBERS OF THE "LEAST SUCCESSFUL" CRITERION GROUP

Member*	r	Probability
AA-2	.489	<.05
PB-6	.406	<.05
PA-1	.382	NS
CA-8	.325	NS
PB-7	.036	NS
AA-1	.108	NS
CA-5	-.106	NS
AB-8	-.257	NS
PA-3	-.379	NS

*coding system for counseling group and member.

between the two variables was a function of the placement in the criterion groups (outcomes,) e.g., low negative to significant positive relationships were found in both criterion groups.

Discussion

In summary, the results of this investigation did not support: 1) the predicted positive relationship between outcomes of group counseling and the increase during group counseling in positive-negative affect ratios associated with topics self, other persons, members of immediate family, and authority figures and 2) the predicted differences in topic and affect between individuals assessed as benefiting most from group counseling and individuals assessed as benefiting least from group counseling. In addition, contrary to expectations, a similar range of relationships between change in affect directed toward self and change in affect directed toward other persons existed among individuals assessed as benefiting most from group counseling and among individuals assessed as benefiting least from group counseling.

The hypotheses formulated for this study seemed reasonable in view of counseling theory and previous research in individual counseling. Yet when subjected to statistical analysis these seemingly reasonable hypotheses were not supported. Whether the hypotheses are really untenable or the data of the present study were inadequate or in error cannot be determined except by additional research involving other data from similar experimental conditions.

From the body of knowledge which has developed in the area of group counseling, it appears reasonable to expect changes in content during group counseling to be similar in nature to changes in content during individual counseling. Likewise, it appears reasonable to expect similar relationships between change in content and outcomes in individual counseling and in group counseling. The research reported in the review of the literature demonstrated the positive relationship between outcomes of individual counseling and increase in approval and acceptance of self and other persons manifested in content during the process of counseling. The fact that similar relationships were not apparent in this investigation may have resulted from either the inadequacies of methods for appraising outcomes or from inadequacies of treatment method. At the same time, it is conceivable that bias may have been operating in the studies in individual counseling to maximize the relationship between change in content and outcomes. The typical procedure in these studies was to obtain a sample comprised of "successful" and "unsuccessful" clients who, prior to the content analysis, had been in individual counseling. The criterion of success typically was based upon clinical judgments of the counselors. Clients may have been assessed as "successful" or "unsuccessful" by the counselor on the basis of content cues which were subsequently investigated in the content analysis. In terms of specific variables, clients may have been assessed as "successful when they exhibited increased acceptance of self and other persons or assessed as "unsuccessful when these content changes were not manifested. The above conditions would maximize the relationship between content changes and outcomes ("successful" - "unsuccessful ").

The present investigators are cognizant of limitations inherent in this investigation which may have decreased the likelihood of obtaining results more consistent with expectations. A limitation apparent in this investigation and one which is characteristic of many investigations in counseling and psychotherapy is the small sample size. This condition placed limitations upon obtaining results of sufficient magnitude to attain statistical significance and, in addition, places restrictions on the extent to which the obtained results can be generalized to other samples.

The method of assessment of outcomes, although providing for the recognition of different modes of change in individuals resulting from group counseling, was not a specific and well-defined criterion across all groups. The cues upon which therapists and clinical observers based their assessments of outcomes, whether from content of sessions or projective data, were not explicit. Although the above is the typical and principal method counselors and clinicians use in practice to assess progress during and following counseling and therapy, limitations inherent in this approach subsequently place limitations upon results of research in which the approach is utilized.

The method of content analysis utilized in this study is oriented toward investigating the topics which individuals talk about during group counseling and the feelings which an individual holds toward these topics at any given time. Without doubt, this represents an important consideration. However, the present investigators recognize that this method of investigating interactions does not account for the more dynamic processes which are inherent in all groups of people.

The techniques utilized in the present investigation appear applicable to other research efforts in group counseling. For example:

1. An analysis of content using the approach developed in this study could be used to investigate the relationship between content (what clients say) in group counseling and specific personality assessment instruments representing Leary's (6) three levels of sources of information.

2. A study of counselor or therapist judgments could be conducted utilizing the content analysis technique to focus upon specific content cues which counselors apparently use in making their judgments. In a study

of this nature, the only source of data would be that of the interactions of group members in group counseling.

3. **A more detailed study of group interactions might be realized by developing a system of analysis which would include both content categories, as defined in this study, and process interaction categories. The affect categories used in the present research appear to be particularly applicable for use in conjunction with a process interaction approach.**

4. **The content analysis approach could be utilized to investigate just certain relevant content categories for specific individuals. This approach would require a pre-counseling interview(s) and/or diagnostic work-up to focus upon relevant topics for a given client. During the counseling process the change in affect directed toward the relevant topics would be observed. This approach would permit the observation of different modes of change among individuals in the same counseling group rather than expecting all clients to manifest similar modes of change.**

5. **Nonlinear transformations, such as the arcsin transformation used in this investigation, typically have not been applied to content analysis and process interaction analysis studies. A transformation of this nature might well be applied to obtain more efficient and more meaningful results of differences between counseling groups. For example, it might prove valuable to investigate differences in content and process existing between adolescent groups and adult groups, between productive groups and unproductive groups, and between counseling groups and task oriented groups.**

BIBLIOGRAPHY

1. Antenen, Wayne W., Change in Topic and Affect During Group Counseling: Its Relationship to Outcomes of Group Counseling, Unpublished doctoral thesis, University of Illinois, 1963.

2. Broedel, John W., A Study of the Effects of Group Counseling on the Academic Performance and Mental Health of Underachieving Gifted Adolescents, Unpublished doctoral thesis, University of Illinois, 1958.

3. Broedel, John, Merle Ohlsen, Fred Proff and Charles Southard, "The Effects of Group Counseling on Gifted Underachieving Adolescents," Journal of Counseling Psychology, 1960, 7:163-170.

4. Diamond, Solomon, Information and Error, New York, Basic Books, 1959.

5. Gazda, George and Merle M. Ohlsen, "The Effects of Short-Term Group Counseling on Prospective Counselors," Personnel and Guidance Journal, 1961, 39:634-638.

6. Leary, T., Interpersonal Diagnosis of Personality, New York: Ronald Press, 1957.

7. Lerner, Paul and Merle M. Ohlsen, "Discrepancies in Classifying Affect from Tape Recordings," Journal of Student Personnel Association for Teacher Education, 1963, 2:18-26.

8. Ohlsen, Merle M., Research Proposal: Factors Associated with 'Improved' School Adjustment of Underachieving Gifted Fifth Graders, Report in Progress, College of Education, University of Illinois, 1960.

9. __________ and Merritt C. Oelke, "An Evaluation of Discussion Topics in Group Counseling," Journal of Clinical Psychology, 1962, 18:317-322.

10. __________ and Fred C. Proff, The Extent to which Group Counseling Improves the Academic and Personal Adjustment of Underachieving Gifted Adolescents, Cooperative Research Project No. 623, College of Education, University of Illinois, 1960.

11. Peres, Haddassah, "An Investigation of Non-Directive Group Therapy," Journal of Consulting Psychology, 1947, 11:159-172.

12. Raimy, Victor G., "Self Reference in Counseling Interviews, "JOurnal of Consulting Psychology, 1948, 12:153-163.

13. Seemen, Julius, "A Study of the Process of Non-Directive Therapy," Journal of Consulting Psychology, 1949, 13:157-168.

14. Sheerer, Elizabeth T., "An Analysis of the Relationship between Acceptance of and Respect for Self and Acceptance of and Respect for Others in Ten Counseling Cases," Journal of Consulting Psychology, 1949, 13:169-175.

15. Snedecor, G. W., *Statistical Methods*, Ames, Iowa, Iowa State College Press, 1956.

16. Snyder, William U., "A Comparison of One Unsuccessful with Four Successful Nondirectively Counseled Cases," *Journal of Consulting Psychology*, 1947, 11:38-42.

17. __________, "An Investigation of the Nature of Nondirective Psychotherapy," *Journal of General Psychology*, 1945, 33:193-233.

18. Stock, Dorothy, "An Investigation into the Interrelations between the Self-Concept and Feelings Directed toward Other Persons and Groups," *Journal of Consulting Psychology*, 1949, 13:176-180.

19. Talland, George A., "Do Therapists and Patients Share Norms on the Content of Group Discussion?" *Group Psychotherapy*, 1957, 10:10-21.

20. ___________ and David H Clark, "Evaluation of Topics in Therapy Group Discussion," *Journal of Clinical Psychology*, 1954, 10:131-137.

21. Todd, William B. and Thomas N. Ewing, "Changes in Self-reference During Counseling," *Journal of Counseling Psychology*, 1961, 8:112-115.

22. Walker, H. and J. Lev, *Statistical Inference*, New York; Holt, Rinehart and Winston, 1953.

23. Wigell, W. W., *A Content Analysis of Tape Recordings of Group Counseling Sessions with Gifted Underachieving Ninth Grade Students*, Unpublished doctoral thesis, University of Illinois, 1960.

24. ____________ and Merle M. Ohlsen, "To What Extent Is Affect a Function of Topic and Referent in Group Counseling," *American Journal of Orthopsychiatry*, 1962, 32:728-735.